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What model should be used to evaluate the efficiency and effectiveness of a field contracting office

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THESIS

WHAT MODEL SHOULD BE USED TO EVALUATE THE EFFICIENCY AND EFFECTIVENESS OF A FIELD CONTRACTING OFFICE

by

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June 2003

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In the Federal Acquisition Regulations (FAR) Statement of Guiding Principles for the Federal Acquisition System, the vision of the Federal Acquisition System is to deliver best value products or services to the customer. Contracting Officers must achieve this while balancing the many competing interests of the stakeholders in the System. The paradox of efficiency vs. effectiveness can be found in the second sentence by the phrase "balancing the many competing interests in the System". This statement indicates the diverse interest of the many stakeholders involved in the System that in many instances prevent the Contracting Office from being efficient and effective. The Government Performance Results Act of 1993 also requires each agency to establish projected outcomes or results by which they will be evaluated against. This thesis examines various literature and existing measurement systems of field contracting offices to determine if we are properly evaluating efficiency and effectiveness. The thesis also utilizes the Organizational Configuration Model developed by Nancy Roberts to determine where field offices fit. The thesis identifies common themes found in metrics and draws conclusions based on that information. Finally, the researcher proposes a model for Field Contracting Offices to use for evaluating their efficiency and effectiveness. It is the researcher's hope that this thesis will be of benefit to all field contracting offices that struggle with determining their efficiency and effectiveness. Also, it is hoped that Systems Commands find some useful information in this thesis.

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WHAT MODEL SHOULD BE USED TO EVALUATE THE EFFECTIVENESS AND EFFICINCY OF A FIELD CONTRACTING OFFICE

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ABSTRACT

In the Federal Acquisition Regulations (FAR) Statement of Guiding Principles for the Federal Acquisition System, the vision of the Federal Acquisition System is to deliver best value products or services to the customer. Contracting Officers must achieve this while balancing the many competing interests of the stakeholders in the System. The paradox of efficiency vs. effectiveness can be found in the second sentence by the phrase "balancing the many competing interests in the System". This statement indicates the diverse interest of the many stakeholders involved in the System that in many instances prevent the Contracting Office from being efficient and effective. The Government Performance Results Act of 1993 also requires each agency to establish projected outcomes or results by which they will be evaluated against. This thesis examines various literature and existing measurement systems of field contracting offices to determine if we are properly evaluating efficiency and effectiveness. The thesis also utilizes the Organizational Configuration Model developed by Nancy Roberts to determine where field offices fit. The thesis identifies common themes found in metrics and draws conclusions based on that information. Finally, the researcher proposes a model for Field Contracting Offices to use for evaluating their efficiency and effectiveness. It is the researcher's hope that this thesis will be of benefit to all field contracting offices that struggle with determining their efficiency and effectiveness. In addition, it is hoped that Systems Commands find some useful information in this thesis.

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I. INTRODUCTION

A. BACKGROUND

Why is efficiency and effectiveness important to a Contracting Office? In the Packard Commission's (1986 p.42) final report to the President it states:

> We must give acquisition personnel more authority to do their jobs. We must make it possible for people to do the right thing the first time and allow them to use their common sense. When this is done, layers of supervision can be eliminated, reporting can be minimized, and the Department of Defense (DOD) can get by with far fewer people. Only then will productivity and quality become hallmarks of defense acquisition.

This statement gives a clear indication that the System must become more efficient. This is further reinforced in the Federal Acquisition Regulations (FAR) Statement of Guiding Principles for the Federal Acquisition System, namely, the vision of the Federal Acquisition System states:

> All participants in the system are responsible for making acquisition decisions that deliver best value product or service to the customer. Best value must be viewed from a broad perspective and is achieved by balancing the many competing interests in the System. The result is a system which works better and costs less. (FAR 1.102-1)

The paradox of efficiency vs. effectiveness can be found in the second sentence by the phrase "balancing the many competing interests in the System". This statement indicates the diverse interest of the many stakeholders involved in the System that in many instances prevent the Contracting Office from being efficient and effective. In Chapter II this will be discussed in further detail when efficiency and effectiveness are defined. The guiding principles also tells us how to achieve efficient operations:

> To achieve efficient operations, the System must shift its focus from "risk avoidance" to one of "risk management." The cost to the taxpayer of attempting to eliminate all risk is prohibitive. The Executive Branch will accept and manage the risk associated with empowering local procurement officials to take independent action based on their professional judgment. (FAR 1.102-2)

In other words, empower the Procurement Contracting Officer (PCO), and then trust him/her to do the right thing. The guiding principles also empower the PCO "to innovate and use sound business judgment" when a policy or procedure is not specifically addressed in the FAR. In theory, this seems to give the PCO wide latitude to exercise his discretion in making business decisions. In reality, this premise is largely dependent on the support the PCO receives from his upper management and agency hierarchy. As will be discussed later in Chapter II this support has a major impact in a contracting office's efficiency and effectiveness. Indeed, the Federal Government is enamored with the idea of an efficient and effective acquisition system. The decade of the 1990s led to some significant legislation to promote a more efficient and effective acquisition system. This legislation included:

- Government Performance Results Act (GPRA) of 1993
- Federal Acquisition Streamlining Act (FASA) of 1994
- Federal Acquisition Reform Act (FARA) of 1995
- Clinger-Cohen Act of 1996
- FAR Part 15 Rewrite of 1997

All of these legislations sought to make the acquisition system more efficient and effective by focusing on commercial practices. However, the Federal Government cannot completely adopt all of the practices of the commercial sector. The Procurement Round Table (PRT) echoed this point in their 2001 report:

> The Federal Government has been and always will be different from the commercial sector. Thus, while striving to make the Federal Acquisition System more like its commercial counterpart, the PRT continues to recognize the unique constraints that are imposed on a public sector organization. No matter how commercial, competitive, or cost effective the Federal Acquisition Systems becomes, it ultimately will still be governed by public policies—policies that are driven not only by economic objectives, but also by social and political considerations. Despite these limitations, the Federal acquisition system must remain properly focused on mission accomplishment. (The Federal Acquisition System: Transitioning to the 21st Century (p.6))

As shown above, as a public entity, becoming efficient and effective is important to its ultimate stakeholder, the taxpayer.

The problem of measuring efficiency and effectiveness of any organization seems to span the entire public sector. The Government Performance Results Act (GPRA) of 1993 put

forth a requirement that organizations begin to measure themselves against desired outcomes. In other words, their performance and existence will be measured on their results. Implementation of the Results Act has faced a number of challenges since enactment. These challenges have been well documented in various GAO reports (GAO/T-GGD-96-136; GAO/T-GGD-97-83; GAO/T-GGD-98-44; GAO/T-GGD-98-66). GAO auditors acknowledge that it will take time to orient federal managers to a new way of planning and managing and develop routines that enable them to process information and make informed decisions about what they do and how they do it. (GAO/T-GGD-97-113). Most Defense activities still have difficulty linking subjective mission goals to objective outcomes.

Now that we have looked at why efficiency and effectiveness is important, Chapter II will focus on what we mean by efficiency and effectiveness.

The purpose of this thesis is to analyze the metrics a Field Contracting Office utilizes to determine their effectiveness and efficiency. In addition, a metrics model will be developed and recommended for implementation

. The basic goal of this thesis is to propose a model that a contract office may use in determining their efficiency and effectiveness. Included in that will be an analysis of relevant metrics that help to guide organizations to achieve them.

B. RESEARCH QUESTIONS

1. Primary Research Question

What model is needed to measure the efficiency and effectiveness of a Navy Field Contracting office?

2. Secondary Research Questions

a. What is the difference between efficient and effective and why should we strive for both?

b. Where do most Field Contracting Offices fit in the Organizational Configuration model?

c. What metrics are typically used to measure Field Contracting efficiency and effectiveness and what are the issues and/or limitations associated with these metrics?

d. What type of metrics model is required in order to measure the efficiency and effectiveness of a Navy Field Contracting Office?

C. METHODOLOGY

The proposed area of research for this thesis concerns the efficiency and effectiveness of a Navy Contracting Office. Specifically, the research will attempt to define the concepts of efficiency and effectiveness as well as propose a set of metrics or a model that may be used in measuring the effectiveness and efficiency of a Navy Field Contracting Office.

This study will require an extensive review of existing literature as well as previous studies performed on this topic. In addition, it will research the Organizational Configuration model as depicted by Professor Nancy Roberts and analyze where Contracting Offices fit on the Organizational Model and recommend ways to optimize efficiency and effectiveness. Various metrics will be studied to determine their effectiveness in measuring the success of a contracting organization. Also, the research will look at the benefits of the balanced scorecard approach in measuring organizational success. The researcher is in the unique position of being responsible for establishing a metrics program and quality assurance program at the Fleet Industrial Supply Center (FISC) Norfolk Detachment Philadelphia, and as such has extensive access and insight into the current process, metrics, and other data.

The theoretical framework in which the study will be performed will be centered around first defining the organizational configuration model of the contracting office as depicted in Nancy Robert's research on Organizational Configuration. By first doing this, we can examine the tradeoffs between efficiency and effectiveness that a contracting office should consider. The researcher will then examine the balanced scorecard approach in measuring organizational success. Finally, the researcher will propose a model for measuring the effectiveness and efficiency of a contracting office. The researcher plans on using FISC Norfolk Detachment Philadelphia, as a sample of many of the contracting issues that effect a contracting organization. Additionally, the researcher will gather information from other contracting offices as well as look at several private sector organizations to determine a benchmark or possible best practices in organizing and measuring a contract office.

The researcher will use a variety of methods to gather data. First a comprehensive review of the literature will be conducted that will include Department of the Navy, Department of Defense, other Federal Agencies, and commercial sources. This data will be used to provide background on the current state of measuring organizational performance.

The researcher will also analyze a summary of previous Navy Studies conducted over the last 10 years. These studies will serve to identify problem areas and successes. Policies, best practices, General Accounting Office (GAO) reports, National Association of Purchase Managers (NAPM) research studies, the balanced scorecard approach, professional journal articles and previous theses will be reviewed, incorporated and cited as applicable. Electronic searches via the Internet will be a primary method of searching the literature.

The researcher is in a unique position at FISC Norfolk Detachment Philadelphia that allows access to metrics data gathered at all levels of the organization. The researcher is currently responsible for implementing an overall quality assurance program at FISC Norfolk that is used by all of its detachments (Philadelphia, Washington, Hampton Roads, and Norfolk Naval Shipyard). In addition, as the Quality Assurance Program manager, the researcher is required to develop a metrics program that adds value and meets the requirements of FISC Norfolk as well as Headquarters, Naval Supply Systems Command (NAVSUP). The researcher plans on using resources at NAVSUP to help define the methodology they utilize in determining relevant metrics. The researcher also plans on contacting other Navy activities to understand their methodology in selecting metrics. This data along with informal interviews and personal observation will allow the researcher to provide a detailed description of the current environment at FISC Norfolk.

The goal of this study is to provide a variety of benefits to FISC Norfolk and the Naval Supply Systems Command (NAVSUP) and maybe the Department of the Navy as a whole. First, the study should provide FISC Norfolk with a framework to implement a relevant metrics program. This should also provide headquarters with a framework and an understanding of the how their subordinate commands measure performance. This will hopefully provide NAVSUP with a standardized approach that they can implement to the entire field of contracting offices. This may also lead to NAVSUP recommending to the Assistant Secretary of the Navy (ASN) to implement this approach Navy wide.

The researcher does not plan on using a survey. Many of the studies analyzed are recent and provide many anecdotal summaries. Given the researcher's experience in this area, informal interviews with other contracting offices and benchmarking some industry practices will provide enough information to derive conclusions.

Lastly, the study may identify current pathologies in the performance process that can lead to additional research in this area to gain additional efficiencies and process improvement

D. SCOPE/LIMITATIONS/ASSUMPTIONS

The general thrust of the study is to identify the relevant metrics you should examine to determine the performance of a Contracting Office. Problems of capturing non-value added measures are commonplace in today's contracting organizations. Linking metrics to strategic mission and operations is disjointed. Also, establishing a tier metric approach is sometimes difficult to implement. What Headquarters needs is different than what the Commanding Officer (CO) needs, which is different than what the first line supervisor needs. A linking mechanism must be established so all proponents understand where they fit in the overall metric. In addition, the goal of all metrics is that they are value added and motivate positive performance. These issues are critical to understand when you are discussing the performance of a contracting office.

This thesis will focus on measuring efficiency and effectiveness of a Navy Field Contracting Office. As such, major system acquisition and headquarters contracting offices are not included in this study. Since the complexity of work is so divergent in these types of Contracting Offices, it is difficult to establish a specific model for a headquarters command, since their metrics would be significantly different than a field contracting office.

Another limitation on this thesis is that the researcher is recommending a specific model for a field contracting office. This will include some strategic metrics, but only as they relate to the Navy Field Contracting Office and their relationship with NAVSUP. The researcher will not attempt to implement specific strategic metrics for the Navy overall. The metrics limitations will be to a Navy Field Contracting Office.

E. OVERVIEW AND ORGANIZATION

This thesis is divided into four chapters. This chapter has provided background concerning the growing interest in contracting efficiency and effectiveness. In addition, the primary research question and secondary questions along with the scope, limitations and methodology have been discussed.

Chapter II defines efficiency and effectiveness and utilizes the Organizational Configuration model as depicted by Professor Nancy Roberts. It analyze where Contracting Offices fit on the Organizational Model and recommend ways to optimize efficiency and effectiveness. Various metrics will be studied to determine their effectiveness in measuring the success of a contracting organization. Additionally, this chapter will also include an extensive review of existing literature, including an analysis of the balanced scorecard approach.

Chapter III presents data gathered via informal telephone interviews and a contractor's (Booz-Allen Hamilton) summary of previous studies performed by or for the Navy. In addition, the researcher will examine a study performed by the Center for Advanced Purchasing Studies (CAPS) concerning effectiveness of a purchasing office. The researcher will then analyze the results of the data. This chapter will also provide the current metrics that FISC Norfolk and NAVSUP utilizes in measuring their field contracting offices and analyze the usefulness of these metrics as well as look at some current DCMA metrics and analyze their usefulness in a field contracting office. The researcher will also discuss the implications of the obtained results to the data collection process and analyze the results from the perspective of the literature review and the current state.

Chapter IV provides conclusions based on the research results, a model for measuring the efficiency and effectiveness of a contracting office and identifies areas for further study.

F. SUMMARY

Efficiency and effectiveness is found almost everywhere when discussing Government operations. The question of how we achieve it and how we measure it continue to perplex most contracting offices. To achieve a proper balance between efficiency and effectiveness, a contracting office must know their stakeholders and must be able to balance their interests against the overall mission of their organization. Through the research efforts embodied in this thesis, a model will be proposed that field contracting offices can utilize in measuring their efficiency and effectiveness.

Lastly, the study may identify current pathologies in the performance process that can lead to additional research in this area to gain additional efficiencies and process improvement.

II. CONTRACTING OFFICE EFFICIENCY AND EFFECTIVENESS BACKGROUND

A. OVERVIEW OF A FIELD CONTRACTING OFFICE

In order to define the mission of a Field Contracting Office, the mission of its headquarters command must be defined first. The Naval Supply Systems Command's (NAVSUP) primary mission is to support the Navy, Marine Corps, Joint and Allied Forces with high-quality supplies and services, whenever and wherever those supplies and services are needed. NAVSUP delivers *combat capability through logistics*. Navy NAVSUP receives its Contracting Authority from the Secretary of the Navy. NAVSUP is responsible for management of the Navy Field Contracting System (NFCS), which comprise NAVSUP's command activities as well as all other Navy field activities delegated contracting authority by COMNAVSUP, the Head of the Contracting Activity (HCA) for the NFCS. NAVSUP's contracting directorate serves as the HCA principal staff for contracting policy matters, operational review and specific approval actions. Additionally, NAVSUP advocates and facilitates activities necessary to accomplish the cultural and process changes entailed in effecting the Acquisition Reform (AR) goals of reducing acquisition costs and process lead times while improving product and service availability, performance and reliability (http://www.navsup.navy.mil). Therefore, it is NAVSUP's mission to facilitate the achievement of effectiveness and efficiency within their field offices. ASN further defines NAVSUP's contracting responsibilities to include contracting for supplies and services throughout the Department of Navy for which no other contracting activity, office or command is delegated contracting authority. This includes contracting for Naval (but not Marine Corps) activities visual information (motion picture and videotape) productions through the Naval Media Center, unless an exception is granted by the Chief of Naval Operations (N09C4) (Naval Acquisition Procedures Supplement 5201.601(90)(c) (2)).

A field contracting office is responsible for implementing NAVSUP's contracting mission. A typical field contracting office supports both afloat and ashore activities and procures all types of supplies and services to support those customer commands. In addition, NAVSUP's field offices obligate approximately 6 billion dollars a year on

Supplies and Services (Procurement Management Reporting System FY 02 Obligations). A NAVSUP field contracting office receives their contracting authority via an instruction (NAVSUPINST 4200.81 (series)). A field contracting office is responsible for negotiating, awarding, and administering contracts in addition to providing other related services to their customers on issues that relate to the myriad of regulations that govern the acquisition process. The goal of a field contracting office is to provide their customers with the best value products and services required to carry out their mission. As was stated earlier in the FAR's guiding principles, the Contracting Officer must:

a. Satisfy the customer in terms of cost, quality, and timeliness of the delivered product or service.

b. Minimize administrative operating cost.

c. Conduct business with integrity, fairness, and openness; and

d. Fulfill public policy objectives.

All of these requirements have an impact on the efficiency and effectiveness of a contracting office. There are constant tradeoffs that take place in order to satisfy the many stakeholders involved in the process.

NAVSUP (as is the rest of the Navy) is currently undergoing a significant "Transformation" in business affairs to help reduce overall Navy-wide infrastructure costs by $10 Billion dollars. In the Jan/Feb 2003 Navy Supply Corps Newsletter, there appeared an article on "Transforming NAVSUP". The article states, "NAVSUP' has embarked on a journey to better structure and align the organization to most effectively and efficiently deliver combat capability through logistics". In the Fleet Industrial Supply Center (FISC) Norfolk's (the researchers parent command) presentation "Planning and Implementing NAVSUP Transformation", they list the Transformation objectives:

- Maintain ability to accomplish mission.
- Seek opportunities to improve processes.
- Gain efficiencies, which lead to reduced costs.

The goal in transformation is to become more efficient and effective by transforming the way we do business. There are several working groups analyzing all of NAVSUP's functions to determine how to transform operations. Unfortunately, to the best of the researchers knowledge, productivity or efficiency of a contracting office is not being analyzed, only actions, commodities and geographical location.

Now that the mission of a field contracting office has been defined, the question of what is efficiency and effectiveness needs to be answered. In Chapter III, NAVSUP's current metrics for measuring the performance of their field contracting offices will be analyzed to determine if they are truly measuring the effectiveness and efficiency of their field contracting organizations.

B. LITERATURE REVIEW ON EFFICIENCY AND EFFECTIVENESS IN PERFORMANCE MANAGEMENT

The acquisition workforce has never had to account for its contribution to the overall defense strategy of the United States in an explicit, thoroughly rigorous manner. Since the end of the Cold War, however, the acquisition workforce has been pressured to justify itself both in terms of value creation and unique competency (Barzelay and Thompson, 2001). The real problem seems to be that the acquisition workforce has trouble explaining how they provide value. The importance of defining how a contracting office provides value to its customers cannot be understated. It is the crux for developing relevant and important metrics. This leads the contracting office to define what they do and why they do it. Value analysis requires you to seek ways to improve cycle efficiency (value-added time vs. total time) and determine ways to reduce associated costs due to delays, excesses, and non-value added processes (Barzelay and Thompson, 2001).

The Federal Computer Week (May 2003) issued an article explaining the current administration's desire for a performance-based system. According to Mark Froman, the administrator of the office of E-Government at the Office of Management and Budget, "The White House will continue to scrutinize agencies for measurable performance and increased efficiency". The administration's proposed 2004 budget ties agencies funding increasingly tightly to achievements. The 2004 budget specifically addresses five areas of continued weakness, he said:

- Automating inefficient processes, or "paving cow paths." Simply converting a badly planned process from manual to automatic won't make the agency more effective. Agencies should rethink their processes and discover how to get the most from available technologies.
- Program management. Far too many programs still come in past deadline and over budget.
- Redundant buying. Agencies should find ways to consolidate operations so that they need fewer systems.
- Islands of automation. Agencies still haven't solved the age-old stovepipe problem.
- Cybersecurity. Keeping information protected while making it available to those authorized to have it is a never-ending concern.

While the majority of his comments were direct to Information Technology (IT) investments, they also have relevance for non-IT investments. Most field contracting offices that were researched found the same problems in their organizations, especially the first and third bullets cited above.

Graves (2001) defines Government efficiency as the ratio of outputs to inputs. It seems simple enough. However, the general lack of markets to assign value to public sector outputs make the process extremely difficult. Public sector pursuit of efficiency requires:

- Strategic planning to infer required outputs from politically determined outcomes and to make tradeoffs between the desired outputs to determine target levels of service;
- Accounting that allows quantifying the input cost that contributes to an output;
- Quantitative measure of output goals and performance; and
- Motivation and resources to establish the management systems and to make the choices that maximize efficiency.

In Lloyd's (Government Contracting Pathologies, 2000), he indicates that we should calculate whether some contracting offices have excess capacity. If so, transfer personnel to make more sensible distribution of workload. But how can a determination of excess capacity be done without an analysis of a contracting office's efficiency.

In Chapter I we mentioned many of the acquisition reform legislation that was implemented in the 1990s. The main consideration in acquisition reform is whether the new process enables us to field *better* weapon systems, *faster*, and *cheaper* (Booher, Pinker, Smith 1997). This suggests that we must become more efficient in our operations and processes. In addition, in order to attain this objective and demonstrate that improvement and some efficiency has been achieved it is imperative that we establish some measurement for comparing the old process to the new.

(Newcomer and Scheirer, January 2001) studied 23 federal agency's implementation of the Government Performance Results Act (GPRA). In their report, they identified many different steps to performance-based management. They found that performance based management is much more than simply recording measures of program performance and reporting them upwards to oversight bodies and stakeholders. The following steps are needed to develop and collect performance measures useful for decision-making:

- Program stakeholders must come together to reach agreement on strategic and performance objectives and the strategies for achieving them.
- Indicators must be defined for program components that capture program outputs and/or outcomes.
- Data sources must be developed or discovered for those indicators and data must be aggregated and reported in user-friendly formats.
- Data must be used by decision makers to assess and improve results and the data must be addressed at every step in the process from original collection to final reporting.

In addition, evaluators must have the skill set to accomplish all of these steps. This requires significant analytical capacity. Unfortunately, the Newcomer and Schierer study found that few organizations felt comfortable about their agency's capacity for evaluation. Most of this was due to the fact that significant parts of the "evaluation type people" were downsized, as they were not considered "production type employees". So while GPRA has required us to develop performance/outcome-based measures, most organizations have lost the personnel resources to do this type of work. In their recommendations, they offered "the system must strengthen the evaluation skills of their workforce as the basic tenet to enhance the likelihood that the performance management

framework being institutionalized via GPRA will result in both improved program management and desired results".

In Paul O'Connell's study of the new York Police department's CompStat system (Using Performance data for Accountability, August 2001) he found a sophisticated performance measurement system that reorders an organization's day-to-day operations, as well as its overall orientation toward its core mission and goals. CompStat is a metrics tool that gathers various stakeholder input. It is based upon the compilation, distribution and utilization of "real time" data in order to allow field managers to make more informed and effective decisions. The author awards praise to the CompStat model because it included many stakeholders in its development and allowed key stakeholders to recommend specific measurement tools that would motivate performance. It is widely recognized as a significant reason for the reduction in serious crime in the New York area. However, O'Connell cautions, "The CompStat process is not a panacea. It is not a magical cure-all that will transform a poorly run and inefficient organization into a model of public service excellence. Rather, it is an additional tool that can be used to enhance performance by means of careful measurement and planning and effective allocation of resources". The lesson to learn here is to identify all of the key stakeholders and allow them to recommend metrics that not only satisfy the strategic direction of the organization, but also motivates performance and awards successes.

Frederickson (The Potential of the Government Performance and Results Act as a Tool to manage Third-Party Government) says, "GPRA seeks to improve federal agency's efficiency and effectiveness". GPRA posits that federal performance shortcomings are primarily managerial, specifically attributable to poorly articulated missions and inadequate performance information. Even if we better define our missions and track performance to that mission, our efforts can be curtailed by the fact that the third parties (customers, Congress, taxpayers) with whom we partner to deliver public services are not uniform in either kind of responsibility, or in other words, they do not share our values or mission. Frederickson's research also recommended that when developing performance goals, agencies should make clear their role in the delivery of public service, and should use GPRA not only as a means to communicate their performance, but also to communicate constraints that inhibit their performance. It

would be interesting to report to Congress (a requirement of GPRA is to coordinate with key stakeholders) that they are one of the major inhibitors to your agency in achieving your performance goals. Frederickson also provided a summary of the recurring themes that the Government has encountered in previous attempts to implement a GPRA like system:

These themes include:

- It is difficult to reach agreement on goals and to find adequate measures to determine the attainment of goals even if there is agreement on what those goals should be;
- Managers often turn to activity and output measures as proxies for outcome measures;
- Performance measurement and budgeting represent the superimposition of a managerial structure on a political process;
- While performance information has not proven useful for appropriators, it has shown some promise for management decisions.

Given the previous attempts at reforms similar to GPRA, one might expect a similar result. However, Frederickson contends that all other reforms were done via the executive branch, while GPRA originated in the legislative or oversight branch. In addition, GPRA carries the force of law. Even if agencies thought it was another fad, they are legally bound to comply with its requirements. Frederickson's research answered the question on how some agencies are implementing GPRA. He found, based on a preliminary review of the FY 2001 performance plans, with their emphasis on activity measures, rarely did an activity answer the question of Are these measures adequate to evaluate the achievement of program objectives? However, he points out, given the methodological and logistical problems associated with measuring a public program's performance, it is not difficult to understand why the majority of and agencies' measures reflect inputs and activities.

So just by making it mandated by law does not provide us a solution to the problem. As the literature review has indicated, we are spending a lot of time trying to figure out how to comply with GPRA despite the fact it has been a law for 10 years. Agencies are constantly wrestling with contradictory Congressional messages. On one

hand you are held accountable for your results. On the other hand, you are constantly being pushed to devolve more responsibilities to lower levels of government or administer them through private entities and hold them responsible. Probably the best lesson to learn from Fredrickson's research is that GPRA-driven reform efforts can accomplish reform only to the extent that they do not conflict with authorizing law and other existing laws. In his research he found that all of the agencies he was studying were impeded in their efforts to achieve their goals and collect data to determine the level of goal achievement by existing law.

Leading organizations use their performance management systems to achieve results, accelerate change, and facilitate communication throughout the year so that discussion about individual and organizational performance are integrated and ongoing. Thus, an effective performance management system can be a strategic tool for organizations to drive internal change (efficiency) and achieve external results (effectiveness) (GAO 02 –966 Result Oriented Culture). GAO found that performance management systems in leading organizations typically seek to achieve three key objectives:

1. Provide candid and constructive feedback to help individual employees maximize their contribution and potential in understanding and realizing the goals and objectives of the agency.
2. Provide management with the objectives and fact-based information it needs to reward top performers.
3. Provides the necessary information and documentation to deal with poor performance.

Performance management has to start form the top in order for the system to operate as designed. Recognizing this, the Office of Personnel Management (OPM) amended regulations on governing performance appraisals for Senior Executives requiring agencies to establish performance management systems that:

1. Hold senior executives accountable for their individual and organizational performance by linking performance management with the results-oriented goals of the GPRA.
2. Evaluate senior executive performance using measures that balance organizational results with customer satisfaction,

employee perspectives, and any other measures agencies decide are appropriate.

3. Use performance results as a basis for pay, awards, and other personnel decisions.

Agencies were to establish these performance management systems by their 2001 senior executive performance appraisal cycle.

GAO found that most agencies have taken the first step in developing an initial set of expectations for senior executives to address in their individual performance plans that are intended to balance accountability for organizational results with a focus on customer satisfaction and a consideration of employee perspective. In their report to Congress (GAO 02 –966 Result Oriented Culture; Using Balanced Expectations to Manage Senior Executive Performance), GAO summarized the following:

> There is a growing recognition, driven by a variety of worldwide trends and pressing long-term fiscal challenges, that the federal government is on the brink of an enormous transformation in what the Government does, how it does business and in some cases who does the Government's business. Ultimately successful organizations understand that they must often change their culture to successfully transform themselves, and that such a change starts with top leadership. Senior executive performance and accountability for change management will therefore be critical to the success of the federal government's transformation. A specific performance expectation to lead and facilitate change could be a critical element as agencies transform themselves to succeed in an environment that is more results-oriented, less hierarchical and more integrated.

The lesson to learn here is that there will be many influences involved in determining an activity's performance measurement system, some of which will be political and some that may possibly be selfish.

The Veteran's Benefits Administration (VBA) adopted a balanced scorecard approach in fiscal year 1999 as a strategic management tool to drive organizational change, provide feedback to employees on measures they can influence, link performance appraisal and reward systems to performance measures, and provide incentives for managers to work as teams in meeting performance measures. Its scorecard included measures for accuracy, speed and timeliness, unit cost, customer satisfaction, and employee development and satisfaction. VBA incorporated these measures in the

performance appraisals for senior executives in their regional offices where the majority of senior executives are located. They have experienced some success with this approach. Later on in this chapter, the balanced scorecard approach will be analyzed in detail as an approach to achieve performance management success (GAO 02 –966 Result Oriented Culture).

Effective performance management systems seek to provide candid and constructive feedback to help individual employees maximize their potential in understanding and realizing organizational goals and objectives and help reward top performers. In recognizing the importance of creating a results-oriented culture in federal agencies, Congress is considering legislative proposals to, among other things, focus attention on the impact poor performance can have on the effectiveness of an organization and require agencies to have chief human capital officers to select, develop and manage a productive high-quality workforce. (GAO 02-862 Results-Oriented Culture; Insights for U.S. Agencies from other Countries' Performance Management Initiatives) However, this still does not answer the question of what you can do about poor performers. Until the Government relaxes their performance appraisal system to be more in line with the private sector, the Government will continue to experience the poor performance problem with limited to no recourse. Legislative action has to take the place of discussing what we do with poor performers.

C. ORGANIZATIONAL CONFIGURATION MODEL

Professor Nancy Roberts has done extensive research in the area of Organizational efficiency and effectiveness. Robert's perspective is that all Organizations are configured with attributes toward efficiency and effectiveness. The configuration approach is a "holistic stance" and assumes that the parts of an organization "take their meaning from the whole and cannot be understood in isolation". The configurations represent a clustering of organizational attributes (e.g., environment, strategy, structure, culture, beliefs, processes) that fall into coherent patterns. The exercise of configuring an organization first starts by identifying the basic two dimensions of organizational performance – efficiency and effectiveness.

1. What Is the Difference Between Efficiency and Effectiveness and Why Should One strive for Both?

Efficiency refers to the capacity to produce results with the minimum expenditure of time, money, or materials (Websters 1971, 725). Efficiency thus focuses on the input-output ratio. To be efficient is to do things well, to attend to the internal organization by refining, formalizing, and elaborating on existing knowledge and making short-term improvements. Effectiveness on the other hand, is defined as "productive of results" (Websters 1971, 724). The focus is on doing the right thing and that is determined by outcome attainment. It comes from an understanding and interpretation of the exterior environment and what outcomes are required (e.g., Customer satisfaction, goal achievement, negotiated savings).

As discussed above, both efficiency and effectiveness play an important role in organizational performance, yet in the competition for resources, each can interfere with the other. Efficiency depends on focus, precision, repetition, analysis, discipline and control. Effectiveness, on the other hand, relies on experimentation, novelty and loosened control. While effectiveness thrives on experimentation, efficiency attempts to drive out any uncertainties. Consequently, public managers need to make choices between the level of efficiency and effectiveness they intend to pursue. Figure 1 illustrates the four possible combinations, identified as configurations or ideal types that can be theoretically derived when public sector managers seek different levels of efficiency (horizontal dimensions) and different levels of effectiveness (vertical dimension).

Efficiency looks at internal operations, while effectiveness is viewed as how well are we performing by the external environment (stakeholders). An Organization can be considered quite effective by a customer, yet be significantly inefficient when you examine their internal operating procedures.

So why do we need to strive for both? Simply stated, we are required to. As stated previously in this chapter "NAVSUP has embarked on a journey to better structure and align the organization to most effectively and efficiently deliver combat capability through logistics". In addition to Navy transformation, the goal of the GPRA is to

measure us by our outcomes and demonstrate to the taxpayer that we are an efficient and effective organization.

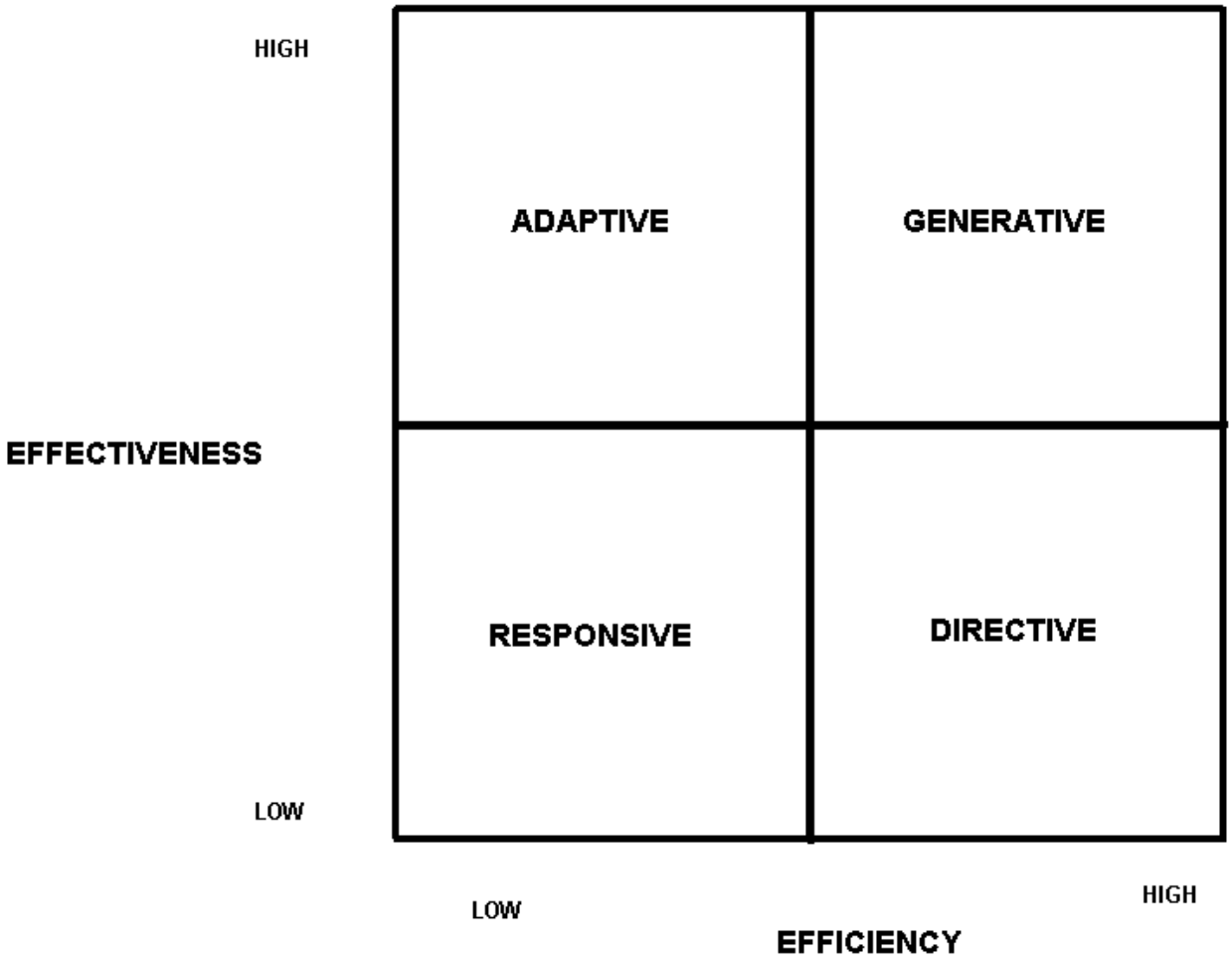

Figure 1. Organizational Configurations

2. Directive Configuration

The Directive Configuration promotes optimal efficiency with less attention devoted to effectiveness. In this configuration, public managers pursue efficiency by running their organizations like well-oiled machines. They focus on maintaining internal order, thus attempting as much as possible to cut the organization off from any disruptive external influences. Managers insist on a common direction to set goals and objectives in order to keep members accountable. They require formalized jobs and standardized work to maintain an orderly coordinated activity. They oversee uniform policies that cover

rights and duties, promotions based on competence and merit, and an impersonal relationship with the workforce to ensure the smooth flow of work. They use budget and operational controls to monitor actions and most organizational change is geared to improve operations. Since change can disrupt orderly routines, they minimize it unless it is deemed essential. When forced to make a change, managers take on the role of strategic planner and driver of the organizational system by using top-down directives to modify standard operating procedures. The management direction setting and planning is a top-down approach that sets goals and strategy based on increasing efficiency. The role of the organizational manager is a planner/controller type and the role of the employee is "soldier" and order taker. Discretion and flexibility are minimal in deference to the norms of order, stability, and respect for higher authority.

3. Responsive Configuration

The Responsive Configuration relieves the tension between efficiency and effectiveness by ignoring both dimensions. What this means in practice is that public managers do not push their organizations toward effectiveness or efficiency, nor do they make much effort to reconcile the competing demands between the two. This is crisis management at its best as managers muddle through the decision making process. We see this type of organization typically in the political minefields. In their attempts to be responsive to external political forces, they are forced to make a choice between crisis manager (douse political fires when they erupt to accommodate contentious stakeholders) and power brokers (join in the fray by building a base of power and develop strategies to protect organizational interests). Whether they choose the role of crisis manager or broker of power organizational policies are the result of responses made to competing demands made in the political arena. Research evidence to support the Responsive Configuration comes from many sources. In the business literature, organizations falling into this configuration are often treated as reactors—poor performers—because they are considered neither effective nor efficient. Alternatively, in a highly regulated environment organizations falling into this configuration are viewed as good performers. The Responsive Configuration is viewed as an ideal type in a political economy that requires organizations to be accountable to the public by anticipating and responding to its concerns. Responsiveness, not efficiency or effectiveness, becomes the primary driver

under these circumstances. Whether public managers view there roles as crisis managers, who strive to accommodate political interests or whether they see themselves as power brokers who promote their preferred interests, responsiveness becomes the mantel by which they are measured.

4. Adapter Configuration

The Adapter Configuration seeks to optimize organizational effectiveness, downplaying interest in efficiency. Public managers achieve organizational efficiency by adapting to the external environment and meeting customer needs. They decentralize decision making so it rests on the shoulder of members who are closest to customers, substituting customers for bosses as the basis of their actions. They rely on the employee's up-to-date knowledge of the industry and customer demands to provide insightful and innovative ideas to meet customer expectations. These types of organizations reward risk takers and innovative ideas. Organizations are decentralized and focus on collaborative projects and cross-disciplinary teams. Employees are given a general vision of the future, rather than specific goals and objectives, in order to inspire them to search for new ideas rather than a planned plotted course. Flexibility, creativity, exploration and experimentation are far more important to managers than rigid adherence to internal order and control. Research and Development organizations are typical of those in the Adaptive Configuration. National Aeronautics and Space Agency (NASA) during the 1960s is a good example of this organizational configuration. Given a very general mandate by President Kennedy to land a man on the moon within the decade, NASA's goals for how to do it were neither fixed nor precisely determined. Addressing how to meet this mandate, required exploration, experimentation and learning from experience. No one had a formula for what had to be accomplished. NASA developed an agile organization where innovation would be more important than stability. As NASA' administrator, James Webb's credo was "You have to have a system that permits, encourages, and even forces flexibility and adaptive innovation on the part of those people—including the executives—who are responsible for its various elements". Thus NASA went through various organizational changes to ensure flexibility and to induce a state of "organic flux". The efforts produced a decentralized system reliant on program offices and field center for project management. The intention of senior management

was to give the centers what they needed to get the job done and field offices were given the authority to act independently when the situation warranted it. Although managers were expected to be knowledgeable in sound management doctrine and practice, they were also required to do a job without exact definition of what it was or how it should be done. There was no precedent to which a manager could examine. He was on his own to figure out a new or different solution. Maneuverability of the whole and the varied parts was essential for success. As Webb admitted, "we accepted a large degree of organizational instability in order to achieve the necessary degree of maneuverability."

5. Generative Configuration

The Generative Configuration demands optimal efficiency and effectiveness. In this configuration, managers strive for both as they search for ways to reconcile the competing expectations emanating from the two dimensions. Central to operating in this type of configuration is the reliance on stakeholder collaboration. This is the first time we see the mention of stakeholder collaboration in our configuration models. Usually we are pitted against various stakeholders often with differing interests than ours. The generative organization relies on collaboration with the stakeholders to achieve both organizational efficiency and effectiveness. Efficiency derives from the networked stakeholders working together in the pursuit of common means. Effectiveness derives from the networked stakeholders working together in the pursuit of common ends. Stakeholder collaboration, the key element to a generative organization, takes on many forms, including multi-functional teams, partnerships, joint ventures, and alliances. Stakeholders may be internal or external to the organizations. However, collaborations usually require participants to come together quickly to exploit some opportunity or solve some problems that each acting independently could not address. The point is to leverage intellect and promote peoples generative learning—learning that develops their capacity to create new solutions to old problems rather than settle for adaptive learning that only prepares them for coping. The intent of generative learning is to open up new ways at looking at the world and to encourage deeper understanding of a system and its underlying dynamics. Finding public organizations that exemplify all the characteristics of the Generative Organization proves to be more difficult than it was for the first three configurations. There is evidence that some organizations that exemplify some traits of a

Generative Organization, but on a whole would not be classified as generative. There are: stakeholder dialogues and deliberations to craft public policy and organizational direction; learning strategies to review organizational procedures and chart new courses of action; measures of outputs and outcomes to track and improve organizational performance; dedications to customer service and offering only those products and services that add value. While lacking a true holistic generative organization, the many aspects that define a learning organization exist in the some public organizations today.

6. Why is the Configuration Approach Important in Determining the Efficiency and Effectiveness of a Field Contracting Office?

In Chapter 12 of Nancy Robert's book, the configuration approach to management has provoked interest in the part of practitioners and scholars, and support continues to grow as researchers test the various configurations in different organizations and environments. The four configurations simplify the management jungle of competing theories and models for public managers and at the same time, raise the following fundamental questions: How efficient are we and how efficient must we become to reduce costs and conserve resources? How effective are we in meeting customer needs in a changing environment? How responsive are we to stakeholder issues and how responsive must we be, given competing political interests?

In taking a configuration approach, the component parts of each ideal configuration "fit" together. Fit reveals the extent to which organizational components are mutually reinforcing and compatible. When the components fit and are patterned after a configurations ideal, the organization is expected to be a high performer; deviations from ideal types do not perform as well. This is an important concept to understand, especially as it relates to change. Managers must understand how the change may effect the "fit" to their organization. For example, wholesale adoption of techniques because they are promoted as "good business practice" from the private sector, without consideration of organizational fit, risks misaligning the organization and it component parts, which runs the risk of reducing rather than improving organizational performance.

While the Generative Configuration is evolving and has not been found in its entirety as a separate configuration, it captures an important element—the network structure—that has been missing from traditional analysis of this area. Both the

Responsive and the Generative configurations capture characteristics particularly relevant in the public arena. Each acknowledges the importance of stakeholders to the organization's performance: the Responsive Configuration assumes a competitive model of stakeholder relations, while the Generative Configuration assumes a collaborative model of stakeholder relations. Two of the ideal types (Directive and Adaptive) have been demonstrated to be high performers, and the third (Responsive) a good performer in a regulated environment. Therefore, we find there are multiple paths to high organizational performance and "one size does not fit all" and one configuration is "not better than the other".

High performing organizations tend to position themselves as ideal types at either end of the efficiency/effectiveness continuum. Other organizations have been found at varying points along either axis. There are many hybrid organizations found on the configuration model. These types of organizations have dual focus; it seeks the flexibility inherent in the Adaptive Organization, and the control and order characteristic of the Directive Configuration. Many public organizations combine the efficiency of machine bureaus with the adaptations and innovations that professional bring from their fields. This allows organizations to create subunits that specialize in effectiveness through innovation and change and customer building, while another subunit can mine traditional products and services to achieve greater efficiency. Thus the overall corporate entity can benefit because it combines subunits striving for either effectiveness or efficiency.

In order to determine the effectiveness and efficiency of any organization, it is imperative that you first determine where you find yourself on the organizational configuration model. After you have done this, you can plot a course of action and management strategy to achieve the organizational goals. At this point you may be able to offset the competing interests of the efficiency vs. effectiveness paradox.

That's why it is imperative that contracting offices understand how they are configured organizationally so that they can make tradeoffs on efficiency and effectiveness. In other words, why strive for effectiveness if you are strictly a Directive Organization.

7. Where Do Most Field Contracting Offices Fit in the Organizational Configuration Model?

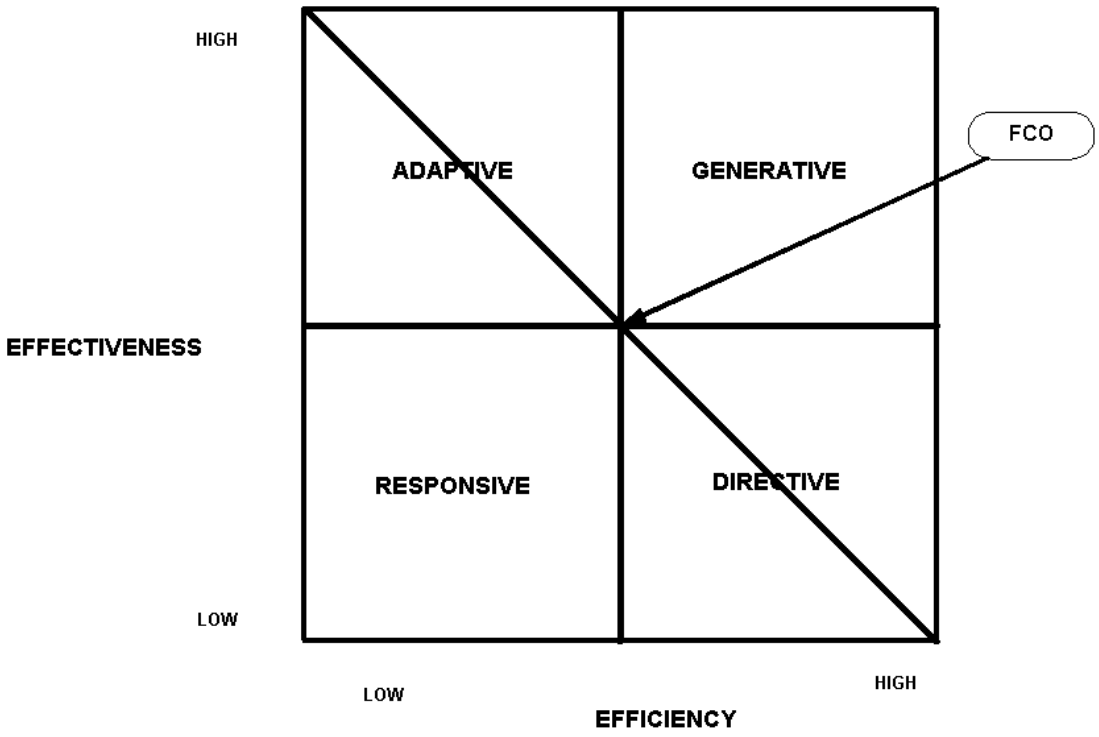

Figure 2. Field Contracting Officer (FCO) Organizational Configuration

The researcher took an informal survey as well as examined several field contracting offices mission statement and strategic plans to determine where they fit on the Organizational configuration. As depicted in Figure 2, most see themselves as a hybrid organization. Continuously striving for customer satisfaction (effectiveness) and supporting the war-fighter while offsetting that with ways to reduce infrastructure and cycle time (efficiency). Most Field Contracting Offices find themselves being graded on how effective they are in meeting both customer needs and the multiple stakeholder interests. When asked how they balance efficiency with effectiveness most mentioned the balanced scorecard as an approach to measuring not just effectiveness and efficiency,

but also the overall performance of the entire organization in how it meets its mission and supports its employees. The researcher now will examine the balanced scorecard approach and how it relates to the organizational configuration model. In addition, the researcher will provide some success stories of the balanced scorecard approach and how it may help in developing an organizational; model for evaluating efficiency and effectiveness.

D. THE BALANCED SCORECARD MANAGEMENT SYSTEM

In John Gray's thesis (Measuring Satisfaction in the Program Manager – Procuring Contracting Officer Relationship, December 1997), the balanced scorecard management systems allows managers to look at their business from four important perspectives (financial, internal business, learning and growth, and customer). The four perspectives of the scorecard take into account the duality of short- and long- term objectives, desired outcomes and performance constraints, and objective and subjective measures. This system is useful because it recognizes that executives do not rely on one performance measure to manage an organization. Instead it offers managers a balanced presentation of both financial and operational matters.

The financial perspective included performance measures, which indicate whether "the organization's strategy, implementation, and execution are contributing to bottom-line improvement" (Kaplan &Norton, 1992, p.77). The internal business perspective provided "measures which focus on the internal processes that will have the greatest impact on customer satisfaction and achieving an organization's financial objective" (Kaplan & Norton, 1996, p.27). The learning and growth perspective identifies the "infrastructure that the organization must build to create long-term growth and improvement. This is the rationale for significant investment in reskilling employees, in information technology and systems, and enhanced organizational procedures" (Kaplan & Norton, 1996, p.12). The customer perspective comprises "generic measures of the successful outcomes from a well formulated and implemented strategy. The core outcome measures include customer satisfaction, customer retention, new customer acquisition, customer profitability, and market and account share in targeted segments" (Kaplan & Norton, 1996, p.26). To utilize the Balanced Scorecard, organizations must first establish goals for each of the perspectives, and then translate these goals into

specific performance measures. (Kaplan & Norton, 1992) The major advantage of the Balanced Scorecard management system, according to Litman And Wheeler (1997) is that it ensures that no organizational processes are ignored and that all types of performance measures are examined by organizational decision-makers to present a clear picture of the status of the organization.

The Procurement Task Force formed by the President's Management Council has recommended that agencies utilize the Balanced Scorecard management system. Toward this end, the Procurement Task Force has identified four major goals for the procurement system: quality, timeliness, price and productivity, which organizations can utilize to build their scorecard systems. Figure 3 represents a graphical depiction of the diamond shaped balanced scorecard (www.isixsigma.com)

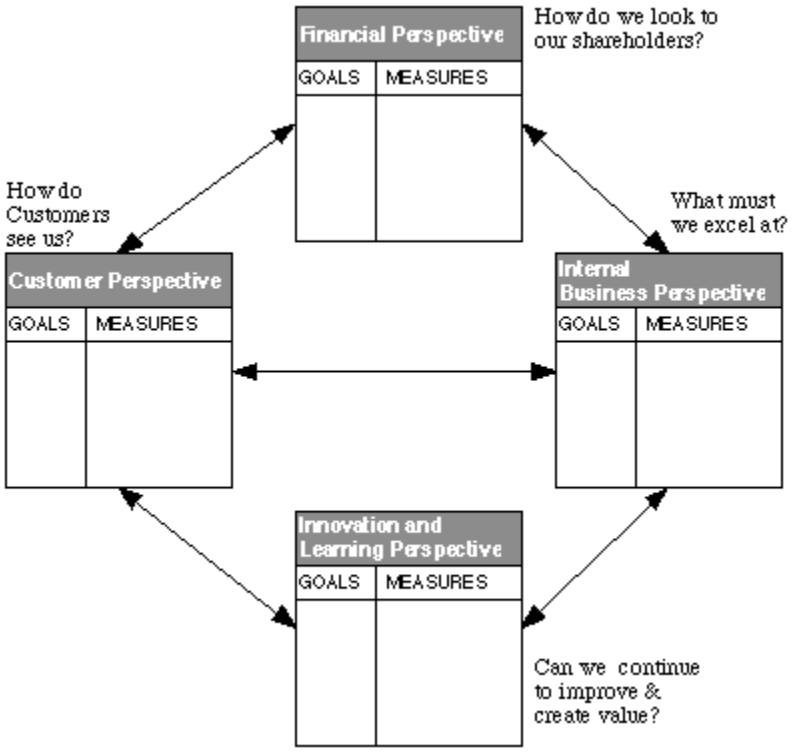

Figure 3. The Balanced Scorecard (From www.isixsigma.com)

Many changes have happened to the balanced scorecard since its inception in 1992. Although the concepts behind the balanced scorecard are fairly simple to understand, they are difficult to implement (Graham Brown's, the Winning Score, 2000).

Graham Brown postulates that measurement is very difficult in organizations because it is not an exact science with hard rules and predictable interrelationships between variables. People run organizations and their actions are sometimes inherently unpredictable. Hence, a measure that made perfect sense at one time might now seem laughable when one sees the behavior it drove in the organization. The balanced scorecard is all about picking the right metrics. One must be careful about how they select metrics. When you focus on improving one metric, two other metrics might decline. We find samples of this in the decade of the 80s and 90s. The 80s was dedicated to improving productivity, as the perception was that the work force was lazy and unproductive. Productivity improved as we approached the close of the decade, but quality worsened. The decade of the 90s focused on the quality movement, which in many cases lowered financial results. As we enter the 21st century, the new mantra for organizational performance is balance, hence the balance scorecard management system.

In his introduction, Graham Brown extols the virtues of measuring what matters. He cites "if you find that the chart of performance data you have been examining every month for the past year is merely confirming what you already knew, you should consider dropping that metric from your scored card". He provides the following tip concerning measurement, "Many things in life are done well without requiring formal data. Measure only those factors that will provide you with information you didn't know already and help you improve performance or make better decisions". The balanced scorecard is a dynamic performance measurement tool and has helped many organizations, both public and private, but it requires much work and expertise to properly implement it. There are many mistakes made in determining what indeed are appropriate measures. Graham Brown provides a list of the top 10 measurement mistakes. He bases this on his years of consultation with both public and private organizations:

1. Tracking Output/Outcome Metrics that cannot be influenced or controlled.
2. Gathering data that tells you what you already know.
3. Gathering data for its own sake.
4. Relying heavily on Customer Satisfaction Surveys.

5. Executives focusing on detailed metrics.
6. Measures are not linked to the strategic plan.
7. Failing to define practical correlations between key metrics.
8. Reporting data that is difficult to read and analyze.
9. "Superstitious" process metrics.
10. Measures that drive the wrong performance.

The challenge is choosing the right metric for the right reason for the organization, keeping in mind the strategic goals and objectives. The Procurement Executive Council (PEC) recommends using a cost to spend model as a way to maximize the efficiency of the procurement office relative to purchasing cost (PEC 2001). Later in Chapter III, the researcher will analyze the different types of metrics currently gathered for a typical field contracting organization.

An important and difficult decision that needs to be made right off the bat is where to begin the scorecard project. One simple answer is to begin at the top. Conceptually this makes a lot of sense because it is easier to develop lower level scorecards that link together if the metrics for the CEO have been defined first (Graham Brown, 2000 p.232). Many companies and Government agencies have implemented the scorecard at many different levels of the organization. The point to be made is that it is fine to start the Scorecard initiative at any level of the organization. Starting at the top is probably the easiest in some ways, but politically this is often just not possible. Often, the best way to sell the CEO or Commanding Officer on the concept is to show it working well in key parts of the business or organization (Graham Brown, 2000 p.233).

E. CHAPTER SUMMARY

This chapter included an overview of a field contracting office and provided a basic understanding of where a field contracting office fit in the overall Navy Contracting function. Also, it included a review of the Navy Transformation effort that and how that impacts a field contracting office. The main thrust of the NAVSUP transformation is "to better structure and align the organization to most effectively and efficiently deliver combat capability through logistics". With that being the mantra, it is imperative for a field contracting office to ensure that they are as efficient and effective as they can be.

Next, the chapter focused on the literature review that was conducted concerning efficiency and effectiveness. Based on this review, the researcher found many examples of the importance associated with obtaining efficiency and effectiveness. The GPRA was the main catalyst for focusing Government agencies on measuring outcomes and results and moving away from just measuring outputs. The literature review included an analysis of many GAO studies as well as endowment studies that examined how organizations were attempting to satisfy the requirements of the GPRA.

The third area the chapter examined was the organizational configuration model developed by Nancy Roberts. Robert's model, which describes different types of organizations (Directive, Responsive, Adaptive, Generative), gives one framework to understand where a field contracting office fits in this model. By understanding the "fit" of an organization, you can better strategize how to achieve the balance between efficiency and effectiveness.

Finally, the chapter examined the balanced scorecard approach, which many organizations are currently using to balance all aspects of their operations. The balanced scorecard approach gives an organization a picture of how they are performing as an overall entity and looks at all parts of the organization (financial, internal operations, customers and employees). The researcher found that many organizations use the balance scorecard approach to maximize both efficiency and effectiveness.

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III. DATA PRESENTATION AND ANALYSIS

A. NAVY STUDY'S

The researcher found a summary of a series of studies performed by the Navy to evaluate the overall performance of a Contracting Office. The summary was provided by a consultant contractor, Booz-Allen & Hamilton (BAH), in response to another study they are conducting for the Navy titled, "Establishing the Effectiveness and Efficiency of the Department of Navy's Material Establishment". The researcher was not able to obtain a copy of the various studies cited in the BAH report, however, BAH's summaries provided the researcher with a starting point to analyze how the Navy has historically looked at the efficiency and effectiveness of the Contracting function. The studies did not limit themselves to a field contracting office, in fact, most of the studies were performed to determine the most effective way to organize the contracting function in the Systems Commands or the Navy overall. Unfortunately most of the studies to date draw on anecdotal evidence and therefore, they only generally address and hypothesize on the efficiency and effectiveness of a contracting office. However, they did address areas concerning contracting office roles and responsibilities as well as overall efficiencies that can be gained by consolidating offices. There are some aspects to the studies that did address cost and effectiveness of operations. Efficiency was addressed on an enterprise-wide basis. The studies provide a background into what the Navy leadership considers relevant when assessing the effectiveness of its contracting function. As you will see in the analysis of the studies, there still seems to remain a perception that all contracting professional (also known as "1102s") are created equally with the same skill mix to acquire any type of supply or service.

In addition, the researcher found a private sector study, sponsored by the National Association of Purchasing Managers (NAPM), that analyzed what measures are considered useful to a CEO when assessing the overall effectiveness of his purchasing operations. Also, another private study, sponsored by NAPM, analyzed the roles and responsibilities of Purchasing Office and how it relates to the overall strategy of the company.

The remaining portion of this chapter will show the name of the study, purpose, and the Analysis/Metric Used. Then the findings or recommendations will be provided with an overall analysis of the study. The researcher will then analyze NAVSUP and FISC Norfolk's current metrics and review what the Defense Contract Management Agency (DCMA) measures.

NAME	DATE	PURPOSE	ANALYSIS/METRIC USED
NAVSEA 02 HQ Contracting Consolidation Study	12/17/91	To consider the consolidation of contracting organization functions. Is consolidation feasible? Could it continue to provide adequate support to customers? Would it result in efficiency savings through personnel reductions?	1. Consolidate three alternatives: - Status Quo - Naval Systems Contracting Command with HCA authority, with contracts personnel co-located with customers. - Combine Hardware Systems Commands into one SYSCOM with the resulting contract organization moved to one site 2. Considered pros and cons of each alternative based on anecdotal evidence. 3. Data used was primarily personnel headcount, and projected reductions that were anecdotal.

Table 1 NAVSEA 02 HQ contracting Consolidation Study

1. Recommendations and Findings

1. Recommended maintaining the status quo.
2. Efficiencies (personnel reductions gained only through consolidation of support and front office functions.
3. Unclear that any efficiency savings were gained in the buying function (number of touch personnel assumed to be consistent with workload).

2. Analysis

While this study provides a historical contracting perspective of consolidation that spans back to 1991, it lacks actual data analysis and relies on anecdotal evidence. Finding 3 cited above gives the impression that the number of people is assumed to be consistent with workload. This is not always true in the contracting organizations interviewed as well as what has historically transpired at the researcher's contracting activity. In addition, the study does not define what workload actually means. Is it the number of purchase requisition on your desk? The number of delivery orders processed? Or does it include the unmeasured workload of acquisition planning and market research? The different complexities of the workload must be examined in order to make the statement that the number of personnel is consistent with the workload. One complex service acquisition could be considered equivalent to 100 delivery orders as they relate to personnel and workload.

NAME	DATE	PURPOSE	ANALYSIS/METRIC USED
ASN RD&A (ABM) Study on Contracting Functional input	6/28/95	Provide assessment of how contracting could be potentially organized under a single SYSCOM, including: - Role of Contracting in the Navy - Assumptions and precepts of successful contracting function. - Recommend an organizational structure (as well as analysis of alternatives considered) - Investigate cultural norm of the contracting community.	Considered three alternatives: 1. Status Quo 2. Examine a CEO Organization. (Locates functional communities with customers as well as along product lines in an IPT format) 3. Examined a Matrix organization, which is similar to a CEO but without a Board of Directors or product line affiliation. . Considered pros and cons of each alternative based on anecdotal evidence.

Table 2 ASN RD&A Report on Contracting Functional Input

3. Findings/Recommendations

1. Contracting personnel evaluations must remain "stovepiped" to maintain independence.
2. Current contracting organizations:
    a. Accommodates geographical dispersions easily.
    b. Gets the job done.
    c. Presents limited opportunity for consolidation of redundant activities (policy and management groups are in most activities).
    d. Does not facilitate inter-SYSCOM or inter-Command interaction.
3. Recommended CEO Organization because it rationalizes redundant work across material establishment and provides a single point of contact for all acquisition matters.

The following other alternatives were noted, but not considered, including:

- Centralization at one site. Not considered because of degradation in service to customer.
- Single SYSCOM with regional offices. Not considered because it creates redundant functions.
- Product oriented contracting office. Not considered because it was too similar to CEO and matrix.

4. Analysis

This study presented a few interesting ideas on restructuring contracting on an enterprise-wide basis. However, once again it was based on anecdotal evidence with no real investigation of contracting office efficiencies by combining functions or products/services. All the analysis was based on a theoretical framework. This study begs the follow-up question of: Were there counterpart studies to this analysis to include consolidation of the financial or inventory function? In addition, the study recommended implementation of the CEO organization, yet the Navy for the most part completely ignored this alternative. It is interesting to note that one of the findings was that "contracting personnel evaluations must remain "stovepiped" to maintain independence". The study then recommends the "CEO organization" as a way of combating this theoretical inefficiency. Much has changed since this study was performed in 1995. The advent of the Integrated Product Team (IPT) has changed the way the organization feels about the stove-piped nature of the contracting function. All the stakeholders in an IPT

bring a functional expertise to the team that allows early identification of problems and issues and considers all functional areas (financial, legal, contracting, engineering, and logistics) integral to the success of the acquisition. So to some degree in many organizations, the CEO philosophy has taken hold. However, in my interviews with other field contracting offices, IPTs are rarely officially formed because the participants involved are from different customer activities.

NAME	DATE	PURPOSE	ANALYSIS/METRIC USED
ASN RD&A (ABM) Navy Contracting Organizational Alignment Study Team (NCOAST))	1/22/98	Baseline current organizational structure. Assess organizational alternatives, including evaluation of: - Top level costs - Responsiveness to customer - Advantages and Disadvantages Conduct analysis around the hypothesis that "smaller organizations could be consolidated with larger contracting organizations to yield labor dollar savings". Conduct regional analysis of consolidation in Hampton Roads and Northwest Region of the United States. Survey contract customers to determine current satisfaction	Considered the following alternatives: 1. Transfer some contracting resources to fleet but maintain current HCA placement. 2. Transfer some contracting resources to fleet and centralize HCA placement. 3. Transfer some contracting resources to fleet and delegate HCA to fleet. 4. Transfer some contracting resources to fleet and delegate HCA to regional commanders. 5. Consolidate all contracting functions into a single SYSCOM. 6. Consolidate field activities into regional commands. 7. Collected data through comprehensive data call to over 600 organizations and queried contracting customers via surveys Used the following evaluation criteria to evaluate alternatives: Responsiveness, Cost, Accountability, and Regions

Table 3 ASN RD&A Navy Contracting Organizational Alignment Study Team (NCOAST)

5. Findings/Recommendations

The baseline organization consisted of 570 activities, 10,000 personnel, 1.3M actions, and $39B in obligations and $500M in direct labor cost. The study found that there was an organic cost savings potential of $83 to $199M (16-39% savings) by consolidating activities. The study also indicated that workload was declining, which would be expected given the reduction in the Defense budget.

The Study observed the following about the status quo structure of the contracting function:

- High customer satisfaction due to decentralization and dedicated resources.
- Inhibits sharing of best practices within and among HCA's.
- Responsibility and accountability are not consistently placed with organizations responsible for the mission.
- There is substantial duplication of effort.
- Contracting missions are misaligned (ownership and management of contracting function is inconsistent with mission).

The study also noted the following challenges associated with consolidation or regionalization:

- Geographical proximity to customer.
- Alignment of ownership and management of contracting resources.
- Productivity and workload, cost, customer satisfaction, and accounting difficulties between an Operations and Maintenance Navy (O&MN) and Navy Working Capital Funds (NWCF) activities.

The study found that no matter which organization structure selected, significant cost savings could be achieved by eliminating small activities and they cited a 1992 CNO study). They also found that customers considered the following important when discussing contracting personnel:

- Geographical proximity.
- Centralized contracts for supplies.
- Dedicated contracting support.
- Use of Purchase Cards.

While the study was probably the most comprehensive analysis of the contracting function navy-wide, it only recommended a few courses of action.

1. Reduce the amount of activities with contracting authority. This will allow for infrastructure reduction and regionalization. This may also lead to increasing customer responsiveness by restructuring to better align resources to support mission functions.
2. Increase Purchase Card authority to $100K.
3. Conduct further analysis of consolidation of contracting operations in the Hampton Roads area.
4. Establish a navy-wide database to track direct labor costs, overhead, actions, and obligations and other contracting functions to quantify efficiency and effectiveness and request contractor support to do further analysis to look at diversity of workload and its impact on customer satisfaction.
5. Accelerate full implementation of SPS in order to increase efficiency and permit record/document sharing between activities.

6. Analysis

The NCOAST study was probably one of the most comprehensive reviews of Contracting functions in Navy organizations. It consisted of data analysis that included actions, dollars, direct labor costs, indirect costs, mission funded organizations and Navy working capital fund organizations. The study also provided HCA responsibilities, along with source of responsibility and ability to delegate decision-making to lower levels. Some of the findings were surprising (centralized contracts for supplies). It is hard to understand why a customer would really care if the contracting office centralized contracts for suppliers. One would think that a customer's main interest is getting what they need when they need it at reasonable prices. And others were obvious (reducing the amount of offices with contracting authority will reduce infrastructure costs). This action in and of itself will reduce infrastructure but it may increase costs in other parts of the enterprise and that's why a thorough efficiency review or business case analysis must be performed before implementation of any action. While the study was comprehensive in its look at cost associated with the contracting function, it failed to look at complexity of

workload, and the system's ability to consolidate work in a center of expertise concept. In addition, the recommendation to establish a navy-wide database to collect important contracting data seemed to be a reasonable recommendation that would gather real data, while providing a useful tool to help manage the Navy's contracting community. Unfortunately, to the best of the researcher's knowledge, this recommendation has not been implemented and the Navy to date still has not conducted an analysis of workload complexity and how it relates to improving overall efficiency and effectiveness.

The NCOAST charter was to conduct an evaluation of existing contracting organizational structures, relationships and processes to identify alternatives that will enable the Navy to better support its customers (effectiveness), streamline processes (efficiency), reduce infrastructure (effectiveness) and eliminated inefficiencies (efficiency). The NCOAST team went to great lengths to analyze customer support and reduce infrastructure goals, but did not dedicate much effort in streamlining policies and eliminating inefficiencies. The significance of this study was its reliance on actual data and not anecdotal analysis. However, it also relied on much anecdotal evidence. For instance, a hypothesis was developed proposing that smaller contracting organizations could be consolidated with larger contracting organizations yielding labor dollar savings. A methodology was developed (based on this hypothesis) to mathematically represent labor dollar savings within the Navy contracting organizational structure. This methodology was based on a Center for Naval Analysis (CNA) study that theorized 20-50% labor savings based on consolidating existing organizations. The team used labor dollars from the Hampton Roads and Northwest regions to build a Navy-wide model. This hypothesis for projecting navy-wide labor dollar savings using the Hampton Roads and northwest region as a benchmark appear misleading as the majority of smaller activities are located in San Diego and Hampton Roads/Washington DC area. In addition, CNA only theorized a 20-50% savings, which first, is a large percentage difference and second, is not developed on factual data, just theorized savings.

The NCOAST study did take a significant look at customer satisfaction. This measure of effectiveness seemed to weigh heavily in their recommendations as presented above. While the data analysis did not go deep enough on the efficiency or productivity

on contracting offices, it did provide enough background to allow further analysis of the contracting function.

NAME	DATE	PURPOSE	ANALYSIS/METRIC USED
ASN RD&A (ABM) The Hunt for 10%: A Framework for Attacking Contract Costs	3/25/99	Reduce contract cost to the Navy by at least 10% and deliver the same quality product. Put a detailed global strategic plan in place Identify those areas in industry where this pressure would potentially derive the most savings.	Study identified savings opportunities that involved consolidation at 3 levels: - Consolidate common requirements across HCA's. - Consolidate common contract support functions. - Consolidate within HCA The process for evaluating and arriving at savings opportunities was not outlined. The contracting markets in which the Navy participates and approximate dollar amounts spent (FY 98) were identified along with the number of Navy contracting activities by region.

Table 4 ASN RD&A (ABM) The Hunt for 10%: A Framework for Attacking Contract Costs

7. Findings/Recommendations

The study identified a decrease in dollars spent on supplies and research and development contracts from 1988-1997, while service contract Dollars remained steady. In addition, the service to supply ratio more than doubled from 1988 – 1997 (i.e., service contracts went from 24% of contract dollars in 1988 to 40% in 1997, while supplies went from 58% to 42% in the same period).

8. Analysis

This study was performed as a preview to the next study. The working group provided a basic framework for the next team to further analyze potential savings to the Navy. The next study team reported out 25 days after this working group and their study is provided for review next.

NAME	DATE	PURPOSE	ANALYSIS/METRIC USED
ASN RD&A (ABM) Red Ink Rising: A Framework for Attacking Contract Costs	4/19/99	Reduce contract cost to the Navy by at least 10% and deliver the same quality product. Put a detailed global strategic plan in place Identify those areas in industry where this pressure would potentially derive the most savings.	Analysis identifies and defines key characteristics for each market including commercial applicability, economies of scale, proprietary data, entry/exit barriers and legal barriers. Market share by industry classification analysis identifies the Navy's share of spend (by dollar amount and percentage) in each industry/market it participates. Study relied on 1998 data.

Table 5 ASN RD&A (ABM) Red Ink Rising: A Framework for Attacking Contract Costs

9. Findings/Recommendations

The overall findings of the working group were as follows:

- The Navy interacts in 2 market cells within a 3 X 3 customer/seller matrix, few to few and many to many.
- An example of few to few is Research & Development (aircraft & airframes, ships, engines/turbines.
- An example of many to many is maintenance and repair of equipment, professional and management services, maintenance of real property, ADP and telecommunication services.
- There is no low hanging fruit or obvious opportunities for leveraging. Sellers are decreasing and future contract costs are being driven by current acquisition decisions. The group found that the ultimate responsibility for savings is at the working level.

The study group recommended that the Navy institute market sector brokers to facilitate contracting strategy development for the procurement of common and related requirements at the appropriate level within the "corporate" Navy. Also, the team recommended that the Navy team with contractors to pursue reduced infrastructure and indirect cost rates at prime and subcontract levels and the navy should also pursue improved cash management of unexpended contract funds.

10. Analysis

The idea of having a "Corporate Strategy" for the contracting and requirements function is a novel idea. By establishing market sector brokers or market managers, the Navy can begin to consolidate their requirements and allow the Contracting Office with the most expertise in that market to satisfy the requirement. In theory, we will have more leverage in dealing with the private sector and in addition, contracting offices can become much more efficient. By establishing "Centers of Excellence" for contracting that utilize the specific expertise of that contracting office, the Navy can ultimately reduce infrastructure costs across the Navy enterprise via either strategic sourcing or functional assessments to determine "expert" offices. This would also change buying habits, hold contract cost steady and provide leverage to private industry solutions. Unfortunately, there are no data sources identified in the study, so the researcher can't determine where the study group received their information.

NAME	DATE	PURPOSE	ANALYSIS/METRIC USED
Center for Navy analysis Study Briefing Potential Savings from cross command contracting	3/09/00	Assess potential for cross-command contracting Recommend approach for cross-command contracting Identify other approaches for reducing contract costs.	Analysis included an evaluation of FY 99 obligations across product lines and SYSCOMS. Analysis also included a description of ongoing cost reduction initiatives

Table 6 Center for Navy Analysis Study Briefing: Potential Savings From Cross-Command Contracting

11. Findings/Recommendations:

The overall findings of the working group were as follows:

- There is an overall lack of requirements visibility before award.
- There is a lack of Cross-Command initiatives.

- There are numerous initiatives underway, however, most are internal to Commands.
- Lack of command-level incentives to pursue savings initiatives.
- Data are not available to maximize opportunity. Either the information is not available within or among activities or the data systems are only good after the fact.

The study group did not making any recommendations. However, they did provide an outline of "models of consolidation" for industry. Unfortunately, the researcher could not get a copy of this model and to the best of his knowledge; this model has not been piloted or implemented at any Navy Command.

12. Analysis

While the study indicated that FY 99 data was used, it does not indicate the data source. It is difficult to determine exact product lines based on the current management information systems in the Navy. To the best of the researcher's knowledge, most analysis of product lines or services is done via a study of the Federal Procurement Data System (FPDS). The FPDS is limited in that it only categorizes a product in a general Federal Supply Code (FSC). Without actually looking at the contract, it is difficult to determine if the supply or service is a candidate for consolidation. In addition, this analysis is all after the fact and provides us little benefit in forecasting future requirements or even forecasting consolidated requirements. More robust management information systems need to be implemented that tracks the requirement form initiation to completion. The system must be standardized so that all members of the acquisition community share a common definition of the product or service being acquired.

On October 24, 2002, ASN RD&A (ABM) issued an executive direction to all Navy Systems Commands addressing the results of an Overhead study. The researcher found no evidence of who performed the study or what data they used in performing the study. The ASN directive inferred that a consolidation of overhead functions could save 10% or roughly 60 Full Time Equivalents (FTEs) across the enterprise. The ASN directive provided a detailed look at Overhead Activities. The researcher recalls answering a data call in 2002 to NAVSUP concerning FTEs performing overhead duties. In theory, the consolidation of overhead type functions across the enterprise, makes

sense, after all, why do you need 10 policy directors. Historically we organize our activities in relationship to headquarters and there is a trickle down effect that is continuously happening. For example, ASN will issue a policy directive to all the Systems Commands, the Systems Commands will then put their spin on it (which is usually just reiterating what ASN has said) then the Field Contracting Office puts their spin on it and implements the policy or guidance. The enterprise can reduce their overheads by standardizing policy in one field office, whose responsibility it is for implementing throughout the entire enterprise, thereby eliminating redundancy. That is just one example of savings that can be achieved through consolidation. However, for success to be achieved standards have to be established and buy-in must be achieved across the enterprise. Without that each office will resort back to old ways of doing business as they perceive no value added in the revised structure. Without having knowledge of the actual study that ASN performed, the researcher will assume that actual data was analyzed in order to come up with the 60 FTE savings. The only concern the researcher has is in ASN's definition of overhead activities. There are some overhead activities that are difficult to consolidate among offices, like bid offices, distribution and file room maintenance.

B. A PRIVATE INDUSTRY STUDY ON MEASURES OF PURCHASING EFFECTIVENESS

In 1997, Harold Fearon Ph.D., C.P.M and Bill Bales, C.P.M conducted a research project for the Center for Advanced Purchasing Studies (CAPS www.capsresearch.org) on the measures of purchasing effectiveness. The foreword of their study state "Measuring performance of the purchasing function continues to be a vexing problem. Hundreds of articles and monographs have been written on the subject over the past several years, often looking for a "magic formula." If there is one, it might include these steps:

1. Review the objectives of the organization to determine the measurements needed.
2. Search for measures that match with the goals.
3. Review with senior management, the chief purchasing officer's (CPO's) superior, and major internal customers to determine what they need.

4. Don't over or under measure.

5. Recognize that what you measure today will differ from what will be needed tomorrow.

The objectives of the study were to determine what measures are considered to be useful by Chief Purchasing Officers (CPOs), and Chief Executive Officers (CEOs), that measure are CPOs currently using and are there any established guidelines CPOs can use to select purchasing performance measures.

1. Research Findings

There was considerable variation in how CPOs viewed the purchasing operations, and in many cases, it all depended on the authority delegated to them by leadership. The research showed that in terms of what the CPOs considered to be the most valuable measures for assessing purchasing effectiveness was:

1. Use of leverage through combining volumes.
2. Accurate, timely, and efficient data collection.
3. Price negotiations resulting in savings.

But in terms of actual measure usage, the three highest-rated measures were:

1. Price negotiations resulting in savings.
2. Department budget versus actual expenditure.
3. Past-delivery performance.

The measures in the organization, managing supplier base, and overall performance evaluation areas simply are not receiving the same relative attention as those in developing supplier base, cost effectiveness, and systems utilization. Also, the CPO found that the five least important measures were:

1. Percent of annual dollar volume delivered directly from supplier to user.
2. Number of major problems solved within 90 days.
3. Percent of suppliers empowered to input to design and specifications.
4. Purchasing dollars moved from outsourcing to in-house.
5. Number of supplier satisfaction surveys this year versus goal.

The CPOs' ranking of measurement guidelines showed these four as the most important:

1. Chief purchasing officers (CPOs) must constantly be on the alert to add new and appropriate measurements, and to delete unneeded ones.
2. Measurements are primarily for the purchasing manager's use in managing and monitoring the department.
3. Good computer systems are essential in supporting the flexibility needed to change and adapt measurements.
4. Measurements should include a trend analysis to indicate direction of progress.

The CEOs/presidents, when surveyed on their need for purchasing measures, said the most-needed measures primarily were non-financial in nature. The five most-needed measures, in order, were:

1. Quality of purchased items.
2. Key supplier problems that could affect supply.
3. Supplier delivery performance.
4. Internal customer satisfaction.
5. Purchase inventory dollars.

The five least-needed measures, in order with the least-needed shown last, were:

1. Purchases from minority-/female-owned firms.
2. Purchasing department headcount.
3. Actual price paid versus a published market basket index.
4. Supplier assessment of purchasing performance.
5. Purchasing administrative cost as percent of purchase dollars spent.

The CEOs wanted a trend analysis on many of the measures, and the timing of their need for many of the measures varied. Purchasing should check with senior management to see what specific measures are needed, how frequently the information is needed, and in what form the information should be presented.

2. Conclusions

There are no "quick fixes" to the purchasing measurement problem. Each organization is unique and requires measures tailored to its current environment and people. However, the research recommended 12 guidelines that should be followed in establishing a measurement system:

1. Measures need to be designed for use at a point in time.
2. Each organization has specific measurement needs at a given point in time.
3. Measures should address financial results, supplier performance, computer systems, and internal practices and policies.
4. Measures must change frequently.
5. Trend analysis often is useful.
6. Measures should not be overdone or underutilized.
7. Measures are only tools.
8. Benchmarking is a source of new ideas and measures.
9. Senior management must see value in the measures used.
10. Measures can show the effectiveness of purchasing, and identify areas needing improvement.
11. Ensure the credibility of measures.
12. Continuous improvement in purchasing depends on measurement.

3. Analysis

This study showed some significant dichotomies between what a Chief Purchasing Office considers important to the effectiveness of a purchasing office, compared to what a Chief Executive Officer finds relevant. CEOs are interested more in those measures, which focus on quality of performance, rather than the traditional quantitative/financial measures, such as headcount and cost to spend a dollar. CEOs were mostly interested in the quality of the supplies and the quality of the relationships purchasing personnel establish with both suppliers and internal customers. CPOs, on the other hand, is interested in the day-to-day operations of their office. It seems odd that CPOs feel that they are measured on the savings they accrue from price negotiations,

while the CEO really only cares about the quality of the product or service delivered. This contrast can many times lead to opposite results. By driving down the price for a product or service, the CPO may be reducing the quality received. On the other hand, ignoring cost of operations and only concentrating on supplier relationships could lead to significant inefficiencies and higher costs, which may all of a sudden become a very important measure to a CEO. The balancing act required by a CPO is a very challenging one. He/she must focus on how they are evaluated by their bosses and then develop operating procedures that will ensure efficient internal operations while satisfying the CEO and other internal customers. It should also be pointed out that CEOs and CPOs for most part are not required to be socially economical when entering into contracts. They obviously do not have the same goals and requirements that a public contracting office has in meeting small business and other socially driven programs.

In research (Purchasing's Organizational Roles and Responsibilities, Fearon, PhD and Leenders, DBA, CAPS 1996)) that attempted to define roles and responsibilities in purchasing offices, it showed that purchasing's current involvement in major corporate activities shows outsourcing as the only activity with a moderate involvement. Particularly low were Government relations, international counter-trade/offset planning, marketing planning and corporate merger/acquisition/alliances. In addition, the same research study showed that the most common roles and responsibilities, in descending order of importance, of a purchasing office were:

- Establishing policies and procedures.
- Executing contracts for common requirements.
- Participating in system-wide purchasing/supply personnel decisions and actions.
- Developing supply systems.

C. WHAT METRICS ARE CURRENTLY BEING USED TO EVALUATE CONTRACTING OFFICE PERFORMANCE AND WHAT ARE THE LIMITATIONS OF THOSE METRICS?

The following is a list of the current Contracting metrics that NAVSUP is gathering and presenting to the Chief of the Navy Supply Corps on a monthly basis as part of the Chief's overall "dashboard" (see the Balanced Scorecard presented in Chapter II):

1. Number of Reverse Auctions conducted and saving achieved.
2. Percentage of Performance Based Service Contracts (PBSC).
3. Percentage of work Competed.
4. Contract Closeout and the number of over-aged contracts.
5. Navy and Marine Corps (NMCI) – Meeting Contract Obligation Requirements.
6. Small Business – Performance Evaluation Summary.
7. Customer Satisfaction.
8. Cycle Time.
9. Procurement Management Review (PMR) reviews as they relate to Purchase Card.

Per discussions from NAVSUP, the source of most of their metrics is the Field Contracting Offices and the Naval Inventory Control Points (Reverse Auctions, Contract Closeout, NMCI, Cycle Time, PMR reviews). Contract closeout is a mixture of MOCAS data and field input. Some of the information is gathered via PMRS (Competition, Small Business, and PBSC), and Customer Satisfaction is done via a NAVSUP web site that customers log onto and complete.

Appendix A represents the current metrics FISC Norfolk utilizes in measuring contracting performance. FISC Norfolk has developed a balanced scorecard approach in determining the efficiency and effectiveness of the contracting operation. The scorecard has three key success factors (Effectiveness, Efficiency and Sustainment):

1. Effectiveness Index: This consists of three weighted individual metrics:
   a. Number of Customers Profiled.
   b. Catalogues and IDTC's on Portal/EMALL.
   c. Customer Satisfaction Index.

2. Efficiency Index: This consists of four weighted individual metrics:
   a. Number of Intranet Hits.
   b. Number of Customers on the Portal/EMALL.
   c. Electronic Transactions Index.
   d. Number of Paperless Review Boards.

3. Sustainment Index: This consists of four weighted individual metrics:

   a. Series standards profiled.

   b. Percentages of IDPs Executed.

   c. Training requirements resourced.

   d. Training hours met.

The scorecard then has a list of initiative metrics. Each initiative will have several initiatives associated with them. The scorecard will capture at least one metric for them. The standards for growth metrics are typically determined by the fiscal month of the year, e.g. in December we should have accomplished 25% of the goal; or by the initiatives plan for implementation. Minimum grades or Statistical Process Control sets the standards for process metrics as appropriate. "Red/Yellow/Green" indicators are assigned to individual metrics. The initiative metrics are:

a. Customer Satisfaction Survey.

b. Portal Customer Market Share.

c. Percentage of Performance based Contracts.

d. Reverse Auctions.

e. Self-Assessment Findings.

f. Small Business.

g. Overage Contract Closeout.

h. SPS Upgrade Effectiveness.

i. Percentage of Customer Requirements met via the Portal/EMALL.

j. Percentage of FISC Market Sourced.

k. NMCI Order Fulfillment rates.

l. Employee Satisfaction.

m. Alignment.

1. NAVSUP's Metrics

The first thing to recognize when analyzing both NAVSUP and FISC Norfolk's metrics is what was said back in Chapter II, namely, "it is easier to develop lower level scorecards that link together if the metrics for the CEO have been defined first". You can develop scorecards at many different levels of the organization. The key is that they link to higher-level metrics within the command or to a higher echelon command. NAVSUP,

as a Systems Command, must focus on strategic and in most cases ASN driven metrics. FISC Norfolk, a lower echelon is interested in a different set of metrics (combination of strategic and operating metrics). That being said, all lower level metrics or operating metrics should feed into the higher level. Unfortunately, NAVSUP's metrics appear to be merely counting and "putting out the fire" type metrics. For instance, how many Performance Based Service Contracts have you awarded? How many overage closeouts have you performed? What is your Competition rate? What are your Small Business Statistics? How many reverse auctions have you conducted and what are the savings? How many PMRs were conducted and how many received an unsatisfactory rating? One can argue that none of these metrics measure the efficiency of a contracting office. Some may allude to the effectiveness of the contracting office (customer satisfaction, NMCI Obligation rates), but overall it would be difficult to determine, just based on these metrics, if your contracting function is efficient or effective. For example, a monthly counting of the number of reverse auctions and performance based service contracts, when both are meant to be contracting tools one should consider when determining the best approach to meeting a customer's requirements, does not provide you with an insight as to whether these tools were used appropriately and achieved the goal of satisfying the customers. There are two mistakes here.

First, establishing reverse auctions as a dashboard metric for the Chief of the Naval Supply Systems Command does not seem appropriate. This measure does not provide an accurate barometer as to whether the contracting function is operating "efficiently and effectively to deliver combat capability through logistics". If used at all, reverse auctions should be a lower level metric.

Second, using a reverse auction goal and measuring an office against that goal sends the wrong message. It may motivate contracting offices to fit a round hole into a square peg. Reverse auctions may be an excellent tool under the right circumstances. The key is to ensure that your contracting officers are trained and know the value of all the tools available to them. Performance Based Service Contracts (PBSCs), Small Business, and Contract Closeout fall into this same category, with a major difference, ASN has mandated these metrics. ASN requires that 50% of all eligible service contracts must be performance based by FY 05. Again, similar to reverse auction, one can argue

that a performance based service contract is just another tool for a contracting officer to consider when determining the best way to satisfy the customer. In addition, assigning a performance based services contract goal against a contracting office violates one of the tenets of selecting a metric; "the metric owner has the ability to influence the metric". While contracting offices have a duty to train requirements generators in the benefits of performance-based contracts, they do not define the actual requirements. Many times the PCOs find themselves struggling to convert a non-performance based statement of work into a performance based statement of work while still satisfying the basic requirements of the service requested. There may be a strong argument to utilize a performance based contract, however, as GAO pointed out (GAO "Contract Management": Guidance Needed for Using Performance Based Service Contracting), many still do not know all the steps required in defining a performance based service contract and more guidance is needed before determining the actual benefit of this type of contract.

NAVSUP's one metric that lends itself to efficiency is the Cycle Time Metric. However, this metric also has some problems. Cycle time measures the percentage of time you award a contract/order in less than 20 days for acquisitions less than or equal to $25,000 and 30 days for acquisitions between $25,000-$100,000. One of the problems associated with this metric is performance motivation. On many occasions, the customer does not require a contract/order within the 20 or 30-day goal (finding issues, required delivery dates, sending in a requirement 60 days before a contract is needed). On the other hand, some customers need their requirements filled immediately. PCOs must be capable of prioritizing workload without having to worry about meeting some arbitrary goal that does not provide a measure for efficiency and can seriously hinder your effectiveness. Most customers would not consider you too effective if you awarded their requirement in 19 days when they needed it in 2 days. This kind of metric may have a negative impact on customer relations and motivate poor business decisions. Not many managers would be happy to know that their PCOs would be willing to give up on the idea of negotiating for a better price because they needed to get an award done within the cycle time goals. In addition, NAVSUP did not consider the transaction costs associated with gathering and managing this metric. The Standardized Procurement System (SPS)

had to be modified and negotiators were required to track the reasons as to why they did not meet the cycle time goals and these had to be reported monthly. The only way to track the reasons is manually and is labor intensive. One has to question the value in gathering this metric when you analyze the cost of gathering it.

All of NAVSUP's metrics were established with no analysis of the management information systems available at each of their field offices. SPS does not have the capability to provide all of the metrics required. Also, all of NAVSUP's metrics are "after the fact" or past metrics and does not look at Work-in-Process (WIP) or any future metrics. They utilize PMRS and MOCAS for some metrics and manual counts for others. One of the basic tenets of a good scorecard is to have a metric that looks as the past present and future in order to understand trends and motivate future performance.

2. FISC Norfolk's Metrics

While it seems many of NAVSUP's metrics fail to measure a contracting office's efficiency and effectiveness, FISC Norfolk's metrics, while lacking in several areas, makes a better attempt at measuring effectiveness and efficiency. FISC Norfolk has adopted the balanced scorecard approach as espoused by Mark Graham Brown. In their Metrics Manual (Appendix A), FISC Norfolk emphasizes that performance metrics should encourage performance improvement, effectiveness, efficiency, and appropriate levels of internal controls. Where practical, they should incorporate "best practices" related to the performance being measured and cost/risk/benefit analysis, where appropriate. The key elements of the performance metrics package should address the following:

- Attaining Organizational Alignment.
- Improvements in quality, cost reduction and/or avoidance.
- Meeting customer requirements.
- Meeting NAVSUP requirements.
- Identification and development of resource requirements.

The establishment of performance goals can best be specified when they are defined within three primary levels:

- Strategic Objectives: Broad, general areas of review. These generally reflect the highest goals based upon mission accomplishment and vision achievement. These metrics will comprise the corporate level metrics.
- Operational Criteria: Specific areas of accomplishment that satisfy major divisions of responsibility within a function. These metrics are generally mission focused and form the underpinning of strategic metrics.
- Warning Measures: Metrics designed to drive improvement and characterize progress or problems within each operation. These are specific quantifiable goals based on individual expected work outputs of critical processes or contributory functions.

The SMART test is frequently used to provide a quick reference to determine the quality of a particular performance metric:

S = Specific: clear and focused to avoid misinterpretation. Should include measure assumptions and definitions and be easily interpreted.

M = Measurable: can be quantified and compared to other data. It should allow for meaningful statistical analysis. Avoid "yes/no" measures except in limited cases, such as start-up or systems-in-place situations.

A = Attainable: achievable, reasonable, and credible under conditions expected.

R = Realistic: fits into the organization's constraints and is cost-effective.

T= Timely: doable within the time frame given.

However, like NAVSUP, in many respects, FISC Norfolk has failed to adequately measure the effectiveness and efficiency of their operation. The detachments that make up the FISC Norfolk Acquisition Group (Philadelphia, Washington, Hampton Roads and Norfolk Naval Shipyard) do not share the same management information system. They are currently attempting to get all of their detachments under the Philadelphia Oracle based management information system. Failure to have a standardized system can create inequities and in some occasions require manual counts of data. Before a metric is established, one should ensure that all participants have the ability to simply measure it via a report out of a database. Unfortunately, some of the metrics established by FISC Norfolk does not look at efficiencies or effectiveness because some of the contracting offices do not have the ability to easily gather these metrics. The researcher is providing a model as part of his recommendations. The model proposed is assuming that all offices

have the same management information system. This is a required element of the model because it will ensure that all have the capability of measuring.

Some of the problems with FISC Norfolk's metrics are the complexity of the measures. Many individuals the researcher interviewed understood the importance of gathering a specific measure, but did not understand how they were being graded against that metric. For instance, on page 11 of Appendix A, FISC Norfolk provides a sample of the efficiency index. It was difficult to understand where the figures for Data and Score came from. Most understood the fact that you would have different weighting assigned to different measures as some are more important than others, but the overall metric's scoring sheet was sometimes difficult to understand. Also, some metrics fall into the same category as NAVSUP's in that they measured processes that FISC Norfolk had little to no influence over. Specifically, the Portal/EMALL metric assumes that we have the ability to add contractors and catalogs to the EMALL. While it is true that we may recommend and encourage contractors to have their catalogs added to the EMALL, we do not control the total process and many times it takes months in the DOD EMALL process chain to actually get a contractor/catalog added to the site. With regards to this metric, FISC Norfolk should concentrate only on the areas that they can influence (# of customers profiled) and disregard the measure of catalogs and Indefinite Delivery Type Contracts (IDTCs) added to the site.

Another problem with the current metrics is the Customer Satisfaction measure. This measure is controlled by NAVSUP and requires the customers to access NAVSUP's website and complete a customer satisfaction survey. Many customers have expressed dissatisfaction with this process mainly because they are being asked on a quarterly basis to fill out a satisfaction survey. In addition, there are many different customers associated with some Commands and it is often difficult to identify what specific customer within that Command needs to fill out the survey. Also, on some occasions, the sample size used to evaluate customer satisfaction was so small that the sample could not be relied on to provide an accurate measure of the effectiveness of customer support.

There are some positives to the current FISC Norfolk balanced scorecard. For example, FISC Norfolk examines all aspects of the contracting function, including

employee and strategic measures. While the operational and customer satisfaction measures account for some aspects of efficiency and effectiveness, employee measures help the organization understand the overall health of the organization. By utilizing this balanced approach the organization can better understand where they need to adjust in order to better align themselves. They can focus on those specific areas that need additional management oversight. This has been most beneficial in the employee satisfaction measure. FISC Norfolk has been able to identify specific concerns of the employees through employee surveys, which has allowed them to focus their efforts in this area. Also, FISC Norfolk has developed a Quality Assurance Plan (QAP) that has enabled them to measure the quality of their operations. By doing quarterly self-assessments, the organization has been able to promulgate on an enterprise basis, lessons learned and more importantly, identify training needs of the workforce. By adopting this approach of self-assessment, FISC Norfolk has established a very robust internal training program and standardized many of their internal operations, which has led to a more efficient contracting function. FISC Norfolk has accomplished this by establishing an INTRANET, also known as the FISC I-Web, for the acquisition function. The FISC Norfolk acquisition group intranet is a secure, internal website designed for use by all acquisition personnel for convenient access to contracting and administrative information in a web based environment. The I-Web is an information resource that provides all necessary web sites/links and information to support the acquisition function in a centralized location. The I-Web provides quick access to and sharing of documents/policy updates and many acquisition issues that are important to the contracting community. By standardizing operations, all contracting personnel now utilize the same clearance templates, and have instant access to lessons learned. The I-Web also acts as a centralized area for communities of expertise exchanges, where negotiators can have instant access to expert advice. FISC Norfolk also utilizes the I-Web to post results of the balanced scorecard. This allows employees to see how the contracting function is performing and more importantly, it acts as a communication link between upper management and the working level. FISC Norfolk provides monthly metric briefing to their workforce, which promotes understanding and feedback. In Chapter IV, the researcher will propose a model (Appendix B) that addresses the

weakness of the current metric process to go along with some of the strengths of the current process.

D. DEFENSE CONTRACT MANAGEMENT AGENCY (DCMA) METRICS

As a member of a contracting office that handles requirements from their inception (Pre-Award) until their disposal (Post Award), the researcher was interested in discovering what metrics DCMA used in evaluating their post-award function. The following information was given to the researcher from the Philadelphia regional DCMA office. DCMA looks at nine metrics. The metrics are listed by title, definition, intent, computation and data source:

1. Title: Prime Contracts On-hand

Definition: The quantity of contracts assigned for primary administration at the end of the report period.

Intent: This metric is used to track workload data for internal and external customers.

Computation: The sum of all prime contracts on-hand as the contract administration office at the end of the report period.

Data Source: Mechanization of Contract Administration Services (MOCAS).

2. Title: Obligated Amount of Prime Contracts On-Hand

Definition: The obligated dollar amount of prime contracts assigned for administration at the end of the period.

Intent: This metric provides workload data for internal and external customers.

Computation: The sum of the obligated dollar amounts of all prime contracts on-hand at the end.

Data Source MOCAS.

3. Title: Unliquidated Amount of Prime Contracts On-Hand

Definition: The unliquidated dollar amount of open prime contracts assigned for administration at the end of the period.

Intent: This metric is used to track workload data for internal and external customers.

Computation: The sum of the unliquidated dollar amount of all prime contracts on-hand at the end of the report period.

Data Source: MOCAS.

4. Title: Percent of Schedule On-Time

Definition: The percent of line item schedules delivered before or during the month of their original delivery dates. The term "line item schedule" refers to a Contract Line Item (CLIN)/subCLIN with a single deliverable group, or in the case of a CLIN/subCLIN having multiple deliveries, each of the individual groupings created to account for differing destinations and/or delivery dates.

Intent: On-time deliveries enable customers to maintain readiness requirements.

Computation: Divide the quantity of line item schedules due during the report month that were delivered during or before the report month by the total quantity of line item schedules due during the report month. Multiply the result by 100. Use the original delivery date of the contract if the contract was not modified due to a Government caused delay OR the most recent modified delivery date due to a Government caused delay. In MOCAS this is the "Delivery Schedule Date" field.

Data Source: MOCAS and an Internal Management Information System.

5. Title: Outstanding Delinquent Line Item Schedule Reduction

Definition: The number of undelivered line item schedules whose current delivery dates have past and whose entire required quantity has not been shipped.

Intent: An unacceptable large number of outstanding schedules reside in our database systems. Many of these are data misrepresentations. Others are legitimate delinquencies. Erroneous data represents true contractor performance to our buying activity customers and is an unreliable input to contractor risk assessments and subsequent surveillance activity. Legitimate delinquencies hinder the readiness requirements of the Armed Services and require top-level visibility.

Computation: Count the line item schedules in which the scheduled quantity exceeds the ship quantity, and the month of its current delivery schedule is past.

Data Source: MOCAS.

6. Title: Undefinitized Contract Actions (UCAs) On-Time Definitized UCAs and Overage UCAs

Definition: UCAs not definitized within 180 days for the date issued are overage.

Intent: To reduce the overall number of overage UCAs.

Computation: The overage undefinitized contract action rate is calculated by dividing the quantity of overage UCAs by the quantity of active UCAs during the reporting period.

Data Source: Pricing and Negotiation AMS module.

7. Title: Contracts Closed On-Time

Definitions: Achieve closeout of contracts within the FAR mandated timeframes.

Intent: To close al contracts 87% of the time within mandated timeframes and to measure our contract closure similar to how our customers measure our contract closeout success. Also, to allow for cleanup of MOCAS Section 2 without being penalized by the old measurement of overage percentage.

Computation: The percentage of time all contracts close within their FAR mandated timeframes.

Data Source: MOCAS Part A and B, Section 8.

8. Title: Contracts Past Final Delivery Date

Definition: Monitor percentage of contracts past their final delivery date (FDD).

Intent: Maintain contracts more than 180 days past their final delivery date at 5% or less as the end of the month and to accurately identify all physically completed contracts for our customers and ensure that these contracts are in MOCAS Section 2.

Computation: Percentage of Contracts in MOCAS part A, Section 1 that are more than 180 days past their FDD.

Data Source: MOCAS Part A, Section 1.

9. Title: Quantity of Overage Contracts for Closure

Definition: Reduce the quantity of overage contracts.

Intent: Reduce the quantity of overage contracts by at least 50%. In addition the intent of this metric is to determine that the quantity of overage contracts does not disproportionately increase in the efforts to meet the current performance target and also allow for cleanup of MOCAS Sections without being penalized by the old measurement of overage percentage.

Computation: The quantity of overage is computed by determining the quantity of contracts in the population that are overage for closure.

Data Source: MOCAS Part A, Section 2 overages.

The researcher considers all of these metrics to be counting metrics and provide little to no insight in organizational effectiveness and efficiency. It seems that DCMA has a good handle on how much work they have, but no idea if they are performing efficiently. The nine metrics listed above look more like a wish list of strategic goals (e.g. reduce the quantity of overage contracts). The problem with these types of metrics is that you may never know if you are doing an efficient job or not. For example, you may be doing an outstanding job in closing out contracts, but the number of overage contracts may increase (due to current contracts becoming overage) leading you to believe that you are not being efficient. They do not address the overall process. A better measure may be to focus on a priority system for closing out contracts, with an initial focus on closing out contracts whose funding expires that fiscal year, with least important priority being the simple fixed price instruments you can easily close out. By focusing on the numbers of closeouts you have accomplished in a specific month, you are motivating employees to focus on the "low hanging fruit" and not the more critical closeouts where you may actually be able to recoup funds and not have to use current year funding to pay for past year performance. DCMA's metrics seem to mirror the top ten measurement mistakes that Mark Graham Brown points out in his book "Winning Score". They provide no real insight into the effectiveness or efficiency of the contract administration function.

What should DCMA consider when measuring their processes? DCMA should consider the same things that FISC Norfolk and NAVSUP need to consider. Mission related metrics should meet the following characteristics (Graham Brown, "Winning Score", 2000, p. 48):

1. There are no more than 20 metrics.
2. Metrics are important and link back to overall goals and mission statements.
3. Metrics are a roughly equal mix of past, present and future.
4. Counting measures are based upon meaningful things, where possible.
5. Judgment metrics are based upon ratings established using specific criteria.

6. Metrics are as objective as possible.
7. Metrics will drive the right behaviors from employees and partners.
8. Collecting data on the metric is feasible and cost effective.
9. Employees can't easily cheat on measures.
10. Most employees can understand measures.
11. Measures lend themselves to be tracked on a regular basis so that changes can be detected in performance when there is still time to do something about it.
12. Measures depict aspects of performance over which we have quite a bit of influence.

These recommended tips should be examined when metrics are established. It provides the metrics manager a checklist to ensure the proposed metrics are adequate and meet the needs of the organization as well as help determine which metrics need to be added or deleted.

E. CHAPTER SUMMARY

This chapter has provided the results and analysis of the data. The results from the research effort revealed affirmation of the literature review. Agencies are still struggling to establish meaningful metrics and are having difficulty in meeting the requirements of the Government Performance Results Act. The research also indicated that the Navy has not ever measured the efficiency of a contracting office (to the best of the researcher's knowledge) and believes based on the results of their studies, that all contracting personnel are alike and have the same skill sets required to satisfy all types of requirements.

Next, the chapter examined the results of a study performed in the private sector that focused on CEOs and CPOs. The results showed some significant dichotomies between what a Chief Purchasing Office considers important to the effectiveness of a purchasing office, compared to what a Chief Executive Officer finds relevant. While CEOs were more interested in the quality of the supplies and the quality of the relationships purchasing personnel establish with both suppliers and internal customers. CPOs, were interested in the savings they accrue from price negotiations. This contrast can many times lead to opposite results. By driving down the price for a product or service, the CPO may be reducing the quality received.

The chapter then focused on the current NAVSUP and FISC Norfolk metrics. The research pointed out many limitations in the current metrics. The research also showed some positive aspects of FISC Norfolk's current process.

The DCMA metrics were then examined to gain a better understanding of the post-award measures that the administrative contacting community employs. The research found some problems with DCMA's current metrics. Many of DCMA's measures do not address efficiency and effectiveness. Instead, they only "count" how many things they are doing.

Finally, the results obtained during this research effort highlight the fact that measuring efficiency and effectiveness of a contracting office is an extremely difficult endeavor. Mixing subjective measures with objective measures is difficult and sometimes unfeasible. Balancing the needs and desires of stakeholders make it extremely difficult to achieve organizational efficiency and effectiveness. A comprehensive instrument or model needs to be developed to help contracting offices measure how well they are performing.

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IV. CONCLUSIONS AND RECOMMENDATIONS

A. CONCLUSIONS

This research effort provides an examination into the contracting function with a specific emphasis on efficiency and effectiveness. The research effort used a qualitative approach to gathering and analyzing data from a Navy and private industry perspective. While the analysis of the Navy Studies were based on summaries provided by a private contractor, it still provided enough information to analyze what and why the Navy has invested significant resources in studying the contracting function. The research also showed the limitations of these studies. Based on the research, the following conclusions are supported by the data gathered:

1. The Navy Has Not Performed An Efficiency or Effectiveness Evaluation of a Field Contracting Office

The research indicates that the Navy studies did not limit themselves to a field contracting office, in fact, most of the studies were performed to determine the most effective way to organize the contracting function in the Systems Commands or the Navy overall. The research also indicates that most of the studies draw on anecdotal evidence and therefore, they only generally address and hypothesize on the efficiency and effectiveness of a contracting office. The studies provide a background into what the Navy leadership considers relevant when assessing the effectiveness of its contracting function but they did not examine a contracting office as an independent entity, nor did they attempt to measure the productivity of a contracting office. Finally, the research indicates there still seems to remain a perception that all contracting professional (also known as "1102s") are created equally with the same skill mix to acquire any type of supply or service.

2. Purchasing Managers Do Not Always Understand How They Are Being Evaluated

An analysis of the private sector revealed that CEOs and CPOs have different opinions when it comes to determining the efficiency and effectiveness of a purchasing office. This research showed the private industry struggles as much as the public sector in determining what measures should be used in determining the efficiency and

effectiveness of a purchasing function. The research showed that CEOs are mainly interested in measuring the effectiveness of a purchasing office, with less emphasis on efficiency. They tend to leave that up to the Purchasing Manager. Specifically, CEOs were interested in the quality of the supplier's product as well as the relationship fostered with the supplier. In the meantime, the research indicated that CPOs were interested in saving money and getting better deals for the organization and did not focus on the quality of the supplier.

On the public side, the Navy and DCMA share the same problems that the private sector face. The measures that are currently employed do little in determining the effectiveness and efficiency of a contracting office. Many of the current metrics motivate inefficient performance and leaves mangers of field contracting offices struggling to understand what they should be doing.

3. Efficiency and Effectiveness are Difficult to Measure at the Systems Command and the Field Contracting Office Level

The research demonstrated that Systems Commands and Field Offices have different perspectives when it comes to measuring efficiency and effectiveness. The research indicates that the current metrics required by NAVSUP does not measure the effectiveness and efficiency of a contracting office and fails in many respects to meet the requirements of the GPRA. The research also showed that many of the "counting" metrics currently deployed come from higher levels within the Government (ASN and SBA) and they have different motives, mostly political, for their actions. The research inferred that many times qualitative metrics like efficiency and effectiveness should only be captured at the operational level and the higher-level metrics should focus only on mission and strategy. The research indicates that the Navy has a difficult time linking their metrics to their overall strategy.

4. The Navy Does Not Have a Model to Measure the Effectiveness and Efficiency of a Contracting Office

Based on the results of the research conducted concerning the definitions of efficiency and effectiveness, the Navy's current measurement process does not adequately measure its contracting offices. To the best of the researchers knowledge, there is no indication that the Navy has a model that evaluates all aspects of the

contracting office. The research shows many holes in the current metrics throughout the hierarchy. Additionally, there is no enterprise-wide metrics employed by the Navy to measure contracting offices against. This void creates considerable problems when measuring the contracting function. The research of the many studies conducted by the Navy indicates that the hierarchy may not be interested in how efficient a contracting office performs. Instead it appears that they are more interested in appeasing the interests of their many stakeholders.

B. RECOMMENDATIONS

Based on the results and analysis of the data reviewed, several recommendations for selecting the proper metrics were presented in Chapter III. These recommendations should be followed when determining what metrics a contracting office should employ to measure its effectiveness and efficiency. The researcher is proposing a model that is based on information obtained at FISC Norfolk Detachment Philadelphia. The model is based on a balanced scorecard approach that divides the organizational metrics into 4 different areas: Strategic, Operational, Customer and Employee. All four areas are equal in importance and the metrics provided in each area must be continually updated to ensure success. The Strategic area will consist of several kinds of metrics that address the overall output of the organization (obligation and action rate) as well as strategic mission metrics (how do you support the war fighter) and vision metrics (actions and obligations per Federal Supply/Service Code (FSC) and other strategic type metrics. The operational area will look at a current breakdown of work-in-process by type of action and will depict a manage-to-milestones approach that will be explained later. The customer metrics will focus on the type of support we provide for the customer including a spend analysis of their requirements and any new initiatives we are providing for them. Since NAVSUP gathers the customer satisfaction metric for its field contracting offices, this metric will not be included in the field model. The employee metrics will focus on available training (courses and dollars), intern program management and significant employee issues and assignments.

A basic requirement for using this model is that you must have a management information system that allows you to extract the proper metrics. FISC Norfolk Detachment Philadelphia uses an Oracle based management information system called

ORACIMS. ORACIMS allows one to measure processes to significant milestones, which is important to a field activity like FISC Norfolk Detachment Philadelphia. A brief description of the detachment is provided so one can better understand the metrics model that is proposed as Appendix (C). FISC Norfolk Detachment Philadelphia is a Navy field contracting office that provides contracting services to over 175 customers. A significant majority of the actions done by this detachment are in the services area and are also high dollar type requirements. The detachment annually obligates approximately one billion dollars. Approximately 2% or 20 million is obligated in the Simplified Acquisition Threshold ($0-$100,000) area. Because Philadelphia has such a significant amount of Large Procurements (over $100,000), their internal management information system is based on a management to milestones philosophy that divides all new procurement work into four areas:

1. The Unsolicited Phase.
2. Solicitation Phase.
3. Technical evaluation Phase.
4. Negotiation Phase.

The management information systems also track all requirements form "cradle to grave" and has the capability to track many types of administrative actions as well as unmeasured work (the system was recently updated so buyers could keep track of the amount of time they spend on acquisition planning, answering administrative issues, customer meetings). This has become important recently because of the Navy "Transformation" effort underway. It provides NAVSUP and ASN an idea of the amount of time dedicated to unmeasured workload. The researcher believes that the model being presented in Appendix B will go a long way in measuring the efficiency and effectiveness of a field contracting office.

The following provides an explanation of the metrics displayed in Appendix B:

1. Strategic Metrics

- **Actions and Obligations:** The first 2 slides compare actions and obligations over the past 2 fiscal years. This gives managers a picture of the current year obligation rates and gives them trend data. The data source for this metric is PMRS.

- **Large Purchase Top Ten Suppliers by Dollars:** Managers can use this type of information for leveraging with suppliers on future requirements. The data source for this metric is PMRS.

- **Actions and Obligations for Services/Supplies:** Provides managers an indication of the type of work you are performing. There is a significant difference between service contracting and supply contracting. Much more oversight is required in a services contract and for the most part our office retains contract administration over the service contracts we issue. It is important that managers understand the significance of this metric. The data source for this metric is PMRS.

- **Large Purchase Top Ten FSCs by Actions:** This metric gives managers an indication of the types of services they are buying. A corresponding metric for supplies would be appropriate if your office procured a majority of them. While additional exploration of the exact type services is required, it still provides management with a good idea of the type of services the office is familiar with and maybe even expertise at acquiring. This type of metric fits into the strategic enterprise area as it may provide headquarters with insight into where they may want to centralize certain types of services or supplies as was recommended in several of the studies analyzed in Chapter III. The data source for this metric is PMRS.

- **Competition:** This metric is included in the Strategic area because it is required by NAVSUP. A month-to-month compilation is recommended to provide trend data. While NAVSUP already gathers this metric for their dashboard, it is still important to keep it at the field level, so you are aware of significant changes that may affect your goal. The data source for this is PMRS. A recommended change to this metric is to calculate the number of dollars that have been successfully broken out of the sole source area. This metric can be gathered via the ORACIMS database as long as the negotiators are diligent in recording this type of transaction. The researcher would also recommend some recognition to those individuals who breakout historically sole source actions.

- **E-Business:** This metric is also included in the Strategic area because it is required by NAVSUP. OSD and ASN have a significant interest in making contracting paperless. OSD had a goal to make all contracting paperless by CY 2001. Their assumption was that SPS would be fully implemented by then and all requirements both received and completed would be done paperless. Unfortunately, DOD has never agreed on an electronic requirements generating system and not all awards are done in SPS for various reasons (urgency, NMCI orders are exempt from SPS because they have their own electronic systems). We include this metric because it allows us to focus on our top requirements providers and jointly try to determine a way to receive electronic purchase requests. The problem with this metric is the data sources. Some information is pulled from SPS, while the rest is pulled from ORACIMS (we added a block to our ORACIMS database to get this information). If you do not have a

management information system, you will have to manually gather this data.

- **Anticipated Future Obligations:** Forecasting future obligations and business is important for planning and resourcing, especially if it is an indefinite delivery type contract where we anticipate issuing significant orders. This metric is intended to look at your top ten future obligations. The data source for this metric is ORACIMS.
- **Contract Closeout:** This metric is included in the Strategic area because it is required by NAVSUP and ASN. The Under Secretary of Defense has a significant interest in reducing the amount of open contracts. The contract closeout status metric just counts the amount of closeouts accomplished. The data source for this is ORACIMS. The dollars deobligated gives management an idea of the amount of money returned to the customer. This also helps focus the employees on a specific area in close-out that has management attention and hopefully will motivate them to closeout those contracts where there is a possibility for recoupment before they focus on the "low hanging fruit". The data source for this metric is ORACIMS and PMRS. The last closeout metric is required specifically by NAVSUP and must be updated monthly. The data source for this metric is MOCAS and ORACIMS.
- **Small Business Goals:** Again, this metric is included in the Strategic area because it is required by NAVSUP and ASN. It provides management with a monthly snapshot of how they are faring against their assigned goal. The data source for this metric is PMRS.
- **Business Development and Major Program Support:** While these two metrics may not fit into a measurement of efficiency and effectiveness, they do provide management with a monthly picture of new developments and a running ledger of major programs supported. The metrics are beneficial when they are communicated to the employees so everybody is familiar with the type of programs the office supports. The data source for this metric is manual.

In summary, the purpose of the strategic metrics is to give management insight into the various strategic interest areas of NAVSUP and ASN, while also focusing on the field office.

2. Operational Metrics

- **Cycle time metrics:** This metric could have possibly been placed in the strategic area because is required by NAVSUP, but it fits better into the operational area. Again, this metric has the possibility of promoting poor business decisions. However, used properly, it can give you insight into possible systemic issues if you are consistently missing your goal. The key to this metric is understanding why the goal is missed and identifies

the root causes for missing the goal. The data source for this metric is SPS.

- **Competitive Sourcing and Streamlined A-76 Process.** This metric could also fit in the strategic area because of the high visibility associated with this program. The researcher recommends it be placed in the operational area because of the effect the A-76 process has on Procurement Administrative Lead Time (PALT), which is an efficiency type metric. Comparing the time it takes to d a full study compared to a streamlined is important to understand and communicate to higher levels. It is also an important metric because a Government win results in no obligations in the DD 350 system. The A-76 process is sometimes a long resource intensive process that receives no "credit" in the PMRS database. Therefore, it is critical to have a total understanding of the workload in this area. The data source for these metrics is ORACIMS.

- **Work-in-Process Profile, Acquisition Strategy and Contract Type:** These metrics provide management with an instant picture of what encompasses their current workload. By breaking the folders/requirements out by new procurement, Type-I Delivery Orders (fixed priced orders under single of multiple award contracts), Type II delivery orders (Time and Material, Labor Hour, Cost Type orders under single or multiple award contracts) and other provides a quick picture of the type of work in process. The acquisition strategy metric also provides you with an instant picture of the strategy the negotiator will be employing in meeting the requirements. Tracking by contract type can also provide management with important information for allocating resources. The large amount of cost type contracts may require moving resources around the command or moving work depending on the overall strategy of the detachment. As stated above, usually more oversight is required in service contracting and especially, cost type service contracts. The data source for these metrics is ORACIMS.

- **New Procurement Summary:** This is where the management to milestones philosophy comes into play. In an organization that has a significant amount of large dollar complex contracts, it is important to install some kind of milestone system. The purpose of the milestone system is to ensure that we are attempting to operate as efficiently as possible. The Philadelphia Detachment has divided the miles tones into four specific phases: The Unsolicited Phase, Solicitation Phase, Technical Evaluation Phase, and the Negotiation Phase. In addition, the new folders are further delineated by Competitive, Sole Source, Competitive Commercial Items and Sole Source Competitive Items. The reason for this separation is the different rules that apply to commercial items (FAR Part 13. 5 and other FAR Part 12 rules). This is just an overall picture of the new work-in-process. The next four metrics provide a more in-depth look at the work-in-process. The data source for this metric is ORACIMS.

- **Unsolicited Phase:** Management has established a baseline that all new procurements should be solicited within 45 days (30 days for commercial items) after receipt. This standard represents the average time it takes to get to the solicitation phase and management understands that with good reason this standard may not be met. Management should review the standard at least quarterly and adjust as appropriate. The detachment uses a red-yellow-green rating to each new folder in this milestone area. The purpose is to encourage the workforce to solicit their requirements as quickly as they possibly can without sacrificing quality. A red rating may not be a bad thing if proper justification accompanies it. This metric may also allow managers to identify some systematic issues concerning the unsolicited phase and may lead to fixing root cause problems. The data source for this metric is ORACIMS.

- **Solicitation Phase:** The goal of the detachment is to have solicitations close in 45 days or less (30 days or less for commercial items). Similar to the unsolicited phase, management understands that there may be instances that this can't be met. The purpose of this metric is to gain insight into the reasons solicitations are delayed and resolve any root cause problems. The data source for this metric is ORACIMS.

- **Technical Evaluation Phase:** The goal of the detachment is to have technical evaluations completed in 45 days or less. While in many instances the negotiator can't control the time it takes for a technical person to perform his duty, it is important for management to understand what causes the delay. The detachment experienced a benefit of tracking this metric. They found the root cause of late technical evaluations (on-site vice off-site evaluations). The data source for this metric is ORACIMS.

- **Negotiation Phase:** The goal of the detachment is to conclude negotiations within 45 days after the solicitation closes. This metric serves in the same capacity as the other three mentioned above. The data source for this metric is ORACIMS.

- **Delivery Orders:** The quantity of delivery orders being written today are increasing at an alarming rate and has become a significant area of interest at FISC Norfolk Detachment Philadelphia. What's also growing at an alarming rate is the number of multiple award contracts. This metric is broken down by order type (I or II) because fixed priced delivery orders (Type I) are less complex than cost type orders (Type II) and further divided by competitive and non-competitive. This is an important feature of the delivery order process as some competitive delivery orders can require technical evaluation factors as well as cost and prices and literally result in a mini-competitive best value source selection. The standard for non-competitive Type I orders is 15 days or less and 45 days or less for Type II orders. The goal of competitive orders is 45 days or less no matter what type of order. There was originally one standard in this metric, however, over time management noticed the trend associated with

multiple award type orders and decided to separate them out so they have a better picture of the delivery order process. The data source for this metric is ORACIMS.

- **Other Procurement Actions:** This provides management with the rest of the workload picture. A renewed focus on contract management has been undertaken by the detachment in order to gain a better understanding of the amount of time and resources expended in contract administration. Not all modifications are equal and the goal of this metric is to separate out the simple ones (exercising an option and funding action) from the more complex (Change orders). Simplified Acquisition Purchase is also captured (most of these are simple). This provides management a snapshot of part of the Contract administration picture. The source data for this metric is ORACIMS.

- **Large Purchase and Simplified Acquisition Self-Assessment Findings and Self-Assessment Recommendations:** It is great to have a picture of the entire workload. The more important question is how well are we doing? What is the quality of the products we produce? This is where the quality assurance management program comes in. The idea is to conduct quarterly self-assessments on at least 10% of the awarded population to gain a better understanding of the quality of the contracting operation. These metrics help gauge how efficient and effective an organization is performing. The first step in the process is to establish a quality assurance plan that identifies the key acquisition processes in your command. Then, after you define the key acquisition processes, you assign a standard that you expect the organization to achieve in that process. For FISC Norfolk a team determined the standards as acceptable error rates. For example, it is expected that 90% of all files sampled will have an adequate Business Clearance. After conducting the self-assessments it is critical to post the results and recommend specific actions whether it be a change in business processes or additional training. This metric is currently gathered manually. However, an automated version is currently being studied.

In summary, the operational metrics are focused on the efficiency of the contacting function. The model suggests a measuring to milestones approach for Work-in-process. Most of the operational metrics have a distinct focus on the present. It leaves the past metrics to the strategic and customer areas and concentrates on the current operations.

3. Customer Metrics.

- **Large Purchase Top Ten Customers by Actions and Dollars:** These metrics focus on the top ten customers either by action or by dollars. This gives management some insight into what customer and how much we are supporting them. This does not rank customer by importance. It provides management with an idea of the resources that may accompany the work

of each customer. It by no means tells the entire picture. Some customers have small quantities of actions, but may be critical to the operations of the war fighter. The purpose of this metric is to give management a rough order of magnitude. The data source for these metrics is PMRS.

- **What do we buy for our top ten customers:** These metrics focus specifically on what we acquire for our customers. These metrics should be utilized in monthly meetings with the customer to determine possible economies by combining requirements and also provide the customer with a little portfolio of where they are obligating their money. These metrics provide a beginning framework in establishing a Customer Relationship Management (CRM) Program. In addition, these metrics could be used on an enterprise-wide basis not just for NAVSUP but also for the entire Navy. The data source for these metrics in PMRS.

In summary, one metric that seems missing in the customer area is customer satisfaction. Historically, the field offices use to survey customers quarterly or semi-annually. In 1999, NAVSUP decided that they would take over the customer satisfaction survey on an enterprise-wide basis. NAVSUP does these surveys quarterly and provides the results to the individual field offices. The field offices have found some flaws to this process, but do not wish to burden customers with more surveys to complete. While it is not included in any of the proposed metrics, the researcher recommends monthly meetings (any medium) as a minimum to ensure that customer expectations are being met. The researcher was not able to develop a meaningful metric for customer meetings other than to keep track of them and report out any significant issues.

4. Employee Metrics

- **Staffing:** Although this is a "counting" metric, it is important to understand the turnover rate of your organization. The researcher recommends a four-year period. Any significant spikes in the chart can alert management to further investigate the root causes of departure. This metric may provide little information for a stable workforce. However, when you combine that with the training budget allocated to the workforce, it can give you a better idea of how much training dollars are available per employee. The data source for this metric is the human resource personnel database.
- **Training Statistics:** This metric provides management with a monthly snapshot of how much training is being received and accounted for by the workforce. By using this metric, one can determine if the employees are accounting properly for the amount of training they are receiving. The data source for this metric is manual (sign-in sheets).

- **Training Budget for 1102s, 1105s and non-1102s/1105s.** This metric provides management with a picture of the training budget and how well the organization is implementing its external training program. This metric does not include in-house training as that is considered a no-cost training program. While FISC Norfolk recommends an Individual Development Plan (IDP) execution rate, the researcher does not support that type of metric. Based on prior experience, the researcher feels that the IDP process has significant flaws. In the past few if any employees actually received the training they requested in their IDPs. Many of the reasons for not executing IDPs were budget driven (training dollars are continually dwindling) and most employees do not consider the IDP process seriously. They are tired of asking for specific training that is endorsed by their immediate supervisor, only to find that there is no funding available when the training is being offered. By knowing what the training budget is in advance of the fiscal year, managers will e able to allocate training dollars per employee. This will help employees select training courses within the budget allocated to them. This metric will help manage the training budget process. The data source for this metric id One-touch Financial (OTF).
- **Next Generation Workforce:** This metric keeps track of all of the training programs and employee projects and possible employee issues. It provides management with an idea of how robust the training program as well as employee involvement. Included in this metric should be any employee issues, other than confidential. The data source for this metric is manual.

In summary, this employee area addresses the past, present and future. Not included in these metrics, but considered important are employee surveys. Employee surveys can often provide insight to the working conditions of the office. However, caution should be used when doing employee surveys. One of the major flaws associated with employee surveys, as experienced by the researcher, is the frequency in which they occur. Monthly or quarterly surveys are not recommended. For best results, the researcher recommends semi-annual or annual employee surveys. The most important aspect of any survey is that you perform some kind of action in response to the survey. To do nothing is unacceptable and taints the importance of the survey as a measurement tool.

C. ANSWERS TO RESEARCH QUESTIONS

1. Primary Research Question

a. What Model Is Needed to Measure the Efficiency and Effectiveness of a Navy Field Contracting Office?

The researcher has developed a model (Appendix B) for measuring the efficiency and effectiveness of a Navy Filed Contracting Office. The model is based on a balanced scorecard approach that divides the organizational metrics into 4 different areas: Strategic, Operational, Customer and Employee. All four areas are equal in importance and the metrics provided in each area must be continually updated to ensure success. Management should be analyzing the metrics on a monthly basis and correct any misalignment of the organization. This will also provide management with insights into where they need to concentrate their resources. For example, results of an employee survey that show employees do not understand where they fit in the organizational strategy or felt that they were lacking the adequate training to meet the mission goals, would allow managers to concentrate on communicating with employees and map out a training program that would satisfy their needs. The model also measures the areas that are required form NAVSUP and ASN, while also providing the field office with there own set of measures.

2. Secondary Research Questions

a. What is the Difference Between Efficient and Effective and Why Should We Strive for Both?

As was discussed in Chapter II, efficiency refers to the capacity to produce results with the minimum expenditure of time, money, or materials. Efficiency thus focuses on the input-output ratio. To be efficient is to do things well, to attend to the internal organization by refining, formalizing, and elaborating on existing knowledge and making short-term improvements. Effectiveness on the other hand, is defined as "productive of results". The focus is on doing the right thing and that is determined by outcome attainment. It comes from an understanding and interpretation of the exterior environment and what outcomes are required (e.g., Customer satisfaction, goal achievement, negotiated savings).

Both efficiency and effectiveness play an important role in organizational performance, yet in the competition for resources, each can interfere with the other. Efficiency depends on focus, precision, repetition, analysis, discipline and control. Effectiveness, on the other hand, relies on experimentation, novelty and loosened control. While effectiveness thrives on experimentation, efficiency attempts to drive out any

uncertainties. Consequently, public managers need to make choices between the level of efficiency and effectiveness they intend to pursue.

Efficiency looks at internal operations, while effectiveness is viewed as how well are we performing by the external environment (stakeholders). An organization can be considered quite effective by a customer, yet be significantly inefficient when you examine their internal operating procedures.

So why do we need to strive for both? Simply stated, we are required to. As stated previously in this chapter "NAVSUP has embarked on a journey to better structure and align the organization to most effectively and efficiently deliver combat capability through logistics". In addition to Navy transformation, the goal of the GPRA is to measure us by our outcomes and demonstrate to the taxpayer that we are an efficient and effective organization. It is also inherent in managing any type of business. If you want to keep a vibrant and successful organization, you must be efficient and effective.

b. Where Do Most Field Contracting Offices Fit in the Organizational Configuration Model?

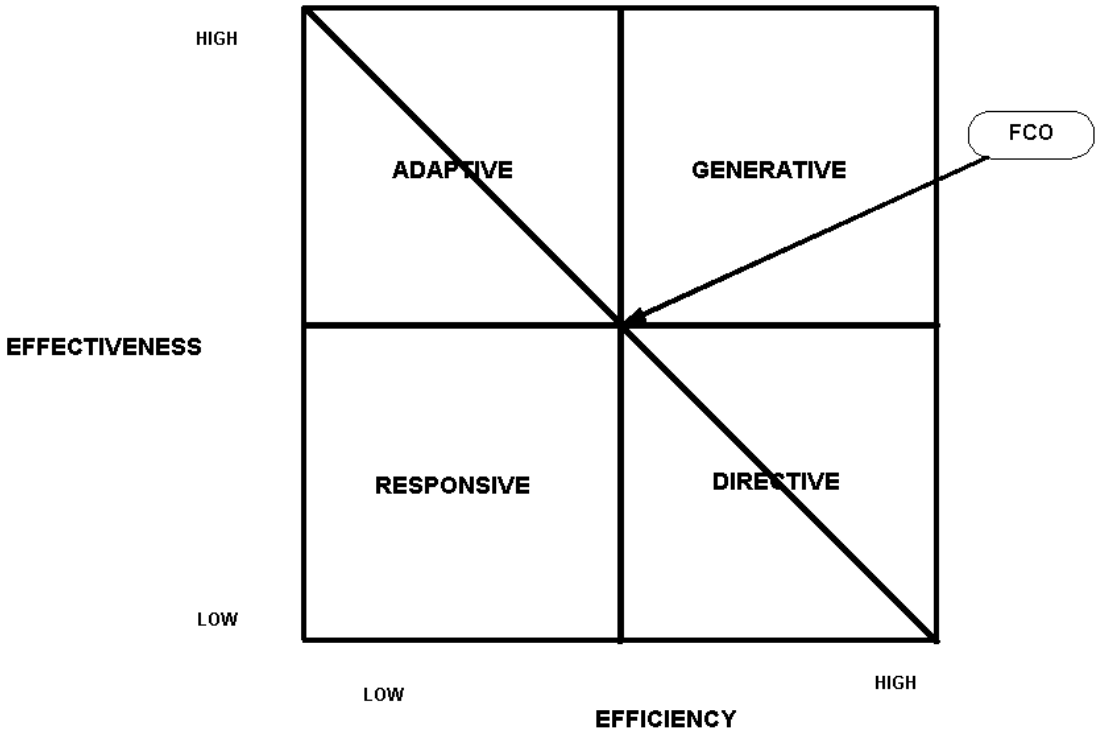

Figure 4. Field Contracting Officer (FCO) Organizational Configuration

The researcher took an informal survey as well as examined several field contracting offices mission statement and strategic plans to determine where they fit on the organizational configuration. As depicted in Figure 4, most see themselves as a hybrid organization. Continuously striving for customer satisfaction (effectiveness) and supporting the war-fighter, while offsetting that with ways to reduce infrastructure and cycle time (efficiency). Most Field Contracting Offices find themselves being graded on how effective they are in meeting both customer needs and the multiple stakeholder interests. When asked how they balance efficiency with effectiveness most mentioned the balanced scorecard as an approach to measuring not just effectiveness and efficiency, but also the overall performance of the entire organization in how it meets its mission and supports its employees.

c. What Metrics Are Typically Used to Measure Field Contracting Office Efficiency and Effectiveness and What Are the Issues and/or Limitations Associated with These Metrics?

The following is a list of the current Contracting metrics that NAVSUP is gathering and presenting to the Chief of the Navy Supply Corps on a monthly basis as part of the Chief's overall "dashboard" (see the Balanced Scorecard presented in Chapter II):

1. Number of Reverse Auctions conducted and saving achieved.
2. Percentage of Performance Based Service Contracts (PBSC).
3. Percentage of work Competed.
4. Contract Closeout and the number of over-aged contracts.
5. Navy and Marine Corps (NMCI) – Meeting Contract Obligation Requirements.
6. Small Business – Performance Evaluation Summary.
7. Customer Satisfaction.
8. Cycle Time.
9. Procurement Management Review (PMR) reviews as they relate to Purchase Card.

FISC Norfolk's metrics are located in Appendix A. As was stated in Chapter III, there are significant limitations to the current metrics. In Chapter II, we found "it is easier to develop lower level scorecards that link together if the metrics for the CEO have

been defined first". You can develop scorecards at many different levels of the organization. The key is that they link to higher-level metrics within the command or to a higher echelon command. NAVSUP, as a Systems Command, must focus on strategic and in most cases ASN driven metrics. FISC Norfolk, a lower echelon is interested in a different set of metrics (combination of strategic and operating metrics). That being said, all lower level metrics or operating metrics should feed into the higher level. Unfortunately, NAVSUP's metrics appear to be merely counting and "putting out the fire" type metrics. For instance, how many Performance Based Service Contracts have you awarded? How many overage closeouts have you performed? What is your Competition rate? What are your Small Business Statistics? How many reverse auctions have you conducted and what are the savings? How many PMRs were conducted and how many received an unsatisfactory rating? One can argue that none of these metrics measure the efficiency of a contracting office. Some may allude to the effectiveness of the contracting office (customer satisfaction, NMCI Obligation rates), but overall it would be difficult to determine, just based on these metrics, if your contracting function is efficient or effective. For example, a monthly counting of the number of reverse auctions and performance based service contracts, when both are meant to be contracting tools one should consider when determining the best approach to meeting a customer's requirements, does not provide you with an insight as to whether these tools were used appropriately and achieved the goal of satisfying the customers. There are two mistakes here.

First, establishing reverse auctions as a dashboard metric for the Chief of the Naval Supply Systems Command does not seem appropriate. This measure does not provide an accurate barometer as to whether the contracting function is operating "efficiently and effectively to deliver combat capability through logistics". If used at all, reverse auctions should be a lower level metric.

Second, using a reverse auction goal and measuring an office against that goal sends the wrong message. It may motivate contracting offices to fit a round hole into a square peg. Reverse auctions may be an excellent tool under the right circumstances. The key is to ensure that your contracting officers are trained and know the value of all the tools available to them. Performance Based Service Contracts (PBSCs), Small

Business, and Contract Closeout fall into this same category, with a major difference, ASN has mandated these metrics. ASN requires that 50% of all eligible service contracts must be performance based by FY 05. Again, similar to reverse auction, one can argue that a performance based service contract is just another tool for a contracting officer to consider when determining the best way to satisfy the customer. In addition, assigning a performance based services contract goal against a contracting office violates one of the tenets of selecting a metric; "the metric owner has the ability to influence the metric". While contracting offices have a duty to train requirements generators in the benefits of performance-based contracts, they do not define the actual requirements. Many times the PCOs find themselves struggling to convert a non-performance based statement of work into a performance based statement of work while still satisfying the basic requirements of the service requested. There may be a strong argument to utilize a performance based contract, however, as GAO pointed out (GAO "Contract Management": Guidance Needed for Using Performance Based Service Contracting), many still do not know all the steps required in defining a performance based service contract and more guidance is needed before determining the actual benefit of this type of contract.

NAVSUP's one metric that lends itself to efficiency is the Cycle Time Metric. However, this metric also has some problems. Cycle time measures the percentage of time you award a contract/order in less than 20 days for acquisitions less than or equal to $25,000 and 30 days for acquisitions between $25,000-$100,000. One of the problems associated with this metric is performance motivation. On many occasions, the customer does not require a contract/order within the 20 or 30-day goal (finding issues, required delivery dates, sending in a requirement 60 days before a contract is needed). On the other hand, some customers need their requirements filled immediately. PCOs must be capable of prioritizing workload without having to worry about meeting some arbitrary goal that does not provide a measure for efficiency and can seriously hinder your effectiveness. Most customers would not consider you too effective if you awarded their requirement in 19 days when they needed it in 2 days. This kind of metric may have a negative impact on customer relations and motivate poor business decisions. Not many managers would be happy to know that their PCOs would be willing to give up on the

idea of negotiating for a better price because they needed to get an award done within the cycle time goals. In addition, NAVSUP did not consider the transaction costs associated with gathering and managing this metric. The Standardized Procurement System (SPS) had to be modified and negotiators were required to track the reasons as to why they did not meet the cycle time goals and these had to be reported monthly. The only way to track the reasons is manually and is labor intensive. One has to question the value in gathering this metric when you analyze the cost of gathering it.

All of NAVSUP's metrics were established with no analysis of the management information systems available at each of their field offices. SPS does not have the capability to provide all of the metrics required. Also, all of NAVSUP's metrics are "after the fact" or past metrics and does not look at Work-in-Process (WIP) or any future metrics. They utilize PMRS and MOCAS for some metrics and manual counts for others. One of the basic tenets of a good scorecard is to have a metric that looks as the past present and future in order to understand trends and motivate future performance.

Unfortunately, some of the metrics established by FISC Norfolk does not look at efficiencies or effectiveness because some of the contracting offices do not have the ability to easily gather these metrics. The researcher is providing a model as part of his recommendations. The model proposed is assuming that all offices have the same management information system. This is a required element of the model because it will ensure that all have the capability of measuring.

Some of the problems with FISC Norfolk's metrics are the complexity of the measures. Many individuals the researcher interviewed understood the importance of gathering a specific measure, but did not understand how they were being graded against that metric. For instance, on page 11 of Appendix A, FISC Norfolk provides a sample of the efficiency index. It was difficult to understand where the figures for Data and Score came from. Most understood the fact that you would have different weighting assigned to different measures as some are more important than others, but the overall metric's scoring sheet was sometimes difficult to understand. Also, some metrics fall into the same category as NAVSUP's in that they measured processes that FISC Norfolk had little to no influence over. Specifically, the Portal/EMALL metric assumes that we have the ability to add contractors and catalogs to the EMALL. While it is true that we may

recommend and encourage contractors to have their catalogs added to the EMALL, we do not control the total process and many times it takes months in the DOD EMALL process chain to actually get a contractor/catalog added to the site. With regards to this metric, FISC Norfolk should concentrate only on the areas that they can influence (# of customers profiled) and disregard the measure of catalogs and Indefinite Delivery Type Contracts (IDTCs) added to the site.

Another problem with the current metrics is the Customer Satisfaction measure. This measure is controlled by NAVSUP and requires the customers to access NAVSUP's website and complete a customer satisfaction survey. Many customers have expressed dissatisfaction with this process mainly because they are being asked on a quarterly basis to fill out a satisfaction survey. In addition, there are many different customers associated with some Commands and it is often difficult to identify what specific customer within that Command needs to fill out the survey. Also, on some occasions, the sample size used to evaluate customer satisfaction was so small that the sample could not be relied on to provide an accurate measure of the effectiveness of customer support.

d. What Type of Metrics Model is Required in Order to Measure the Efficiency and Effectiveness of a Navy Field Contracting Office?

As stated in the answer to the primary research question, a balanced scorecard metrics model (Appendix B) is presented as a method for measuring the efficiency and effectiveness of a Filed Contracting Office.

D. SUGGESTIONS FOR FURTHER RESEARCH

While pursuing this thesis, the researcher found one major area that should be further researched:

1. Measuring the Complexity of an Individual Contract Action

Because measuring the productivity of a contracting office is difficult, the Navy has a tendency to lump together all of the different types of contract actions generated by a contracting office. As the research indicated, the Navy seems to think an "1102 is an 1102". The Navy also tends to think, "An action is an action". The researcher knows from his experience that not all actions are the same and some are much more complex that others. While the researcher's model segregates the current work-in-process by

action type, he does not measure the time it takes to complete a particular action. Further research into developing a time in motion study or some other study should be conducted. The ultimate measure of efficiency in a contracting office can only be attained when you have a full understanding of the type of work that is performed there. This type of analysis should always be done before comparing contracting offices against each other. The researcher recommends gathering a team consisting of an independent review official and Navy field contracting office managers and chartering them to establish a standard in which each contracting actions is measured. It should be noted that NAVSUP attempted to do this in 1994, but without an independent review authority. The team disbanded after the third meeting because they were all gaming the process to the benefit of their specific activity. By incorporating an independent review official, you may be able to subvert the political pressure that the prior team encountered. Once this is established, the Navy will have a better understanding of the productivity and efficiency of a field contracting office.

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APPENDIX A. FISC NORFOLK METRICS

FISC ACQUISITION GROUP

Metrics Alignment Initiative

Management Guide

APPENDIX A

Metrics Management Guide

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Corporate Metrics Alignment

Corporate Metrics are intended to provide the Commanding Officer and the Acquisition Executive Board an overview of mission accomplishment and movement toward vision achievement

There continues to be increased emphasis on designing metrics to drive improvement while maintaining oversight of complex operations. Therefore, performance metrics should encourage performance improvement, effectiveness, efficiency, and appropriate levels of internal controls. Where practical, they should incorporate "best practices" related to the performance being measured and cost/risk/benefit analysis, where appropriate. This section discusses the principles and concepts used in developing effective performance metrics for FISC Norfolk Acquisition Group operations. The underlying principles of metrics used within FISC Norfolk are based upon the writings of Mark Graham Brown is his books "*Keeping Score"* and *"Winning Score"*. Additionally, *"The Balanced Scorecard- Translating Strategy into Action"* model of David Norton and Robert Kaplan will provide a recommended approach to ensure a complete set of metrics is promoted. This guide assumes reader familiarity with these topics, and as such will avoid detail review of their principles.

Naval Supply Systems Command has promulgated specific guidelines for metrics in:

- Customer satisfaction
- Organizational performance
- Workforce excellence

Additionally, the Acquisition Group Business Plan identifies critical initiatives. The key elements of the performance metrics package to meet these initiatives should address the following:

- Attaining Organizational Alignment
- Improvements in quality, cost reduction and/or avoidance

- Meeting customer requirements
- Meeting NAVSUP requirements
- Identification and development of resource requirements

The Process

The first step in developing performance metrics is to involve the people who are responsible for the work to be measured because they are the most knowledgeable about the work. Within the Acquisition Group, these people are identified as the initiative owners within the Acquisition Group Business Plan. Once identified and involved, they:

- Identify critical work processes and customer requirements.
- Identify critical results desired and align them to customer requirements.
- Develop measurements for the critical work processes or critical results.
- Establish performance goals, standards, or benchmarks.

The establishment of performance goals can best be specified when they are defined within three primary levels:

- Strategic Objectives: Broad, general areas of review. These generally reflect the highest goals based upon mission accomplishment and vision achievement. These metrics will comprise the corporate level metrics.
- Operational Criteria: Specific areas of accomplishment that satisfy major divisions of responsibility within a function. These metrics are generally mission focused and form the underpinning of strategic metrics.
- Warning Measures: Metrics designed to drive improvement and characterize progress or problems within each operation. These are specific quantifiable goals based on individual expected work outputs of critical processes or contributory functions.

The SMART test is frequently used to provide a quick reference to determine the quality of a particular performance metric:

S = Specific: clear and focused to avoid misinterpretation. Should include measure assumptions and definitions and be easily interpreted.

M = Measurable: can be quantified and compared to other data. It should allow for meaningful statistical analysis. Avoid "yes/no" measures except in limited cases, such as start-up or systems-in-place situations.

A = Attainable: achievable, reasonable, and credible under conditions expected.

R = Realistic: fits into the organization's constraints and is cost-effective.

T= Timely: doable within the time frame given.

Types of Metrics

Quality performance metrics allow for the collection of meaningful data for trending and analysis of rate-of-change over time.

Examples are:

- Trending against known standards: the standards may come from either internal or external sources and may include benchmarks.
- Trending with standards to be established: usually this type of metric is used in conjunction with establishing a baseline.
- Milestones achieved.

"Yes/no" metrics are used in certain situations, usually involving establishing trends, baselines, or targets, or in start-up cases. Because there is no valid calibration of the level of performance for this type of measure, they should be used sparingly.

Checklist for Evaluating Corporate Metrics

The "scorecard" concept will be used by FISC Norfolk to summarize the results of critical metrics. The following checklist from *"Winning Score"* will assist in evaluating the scorecard:

- A reasonable number of metrics is less than 20
- Measures are balanced against past, present and future time perspectives
- All key success factors and business initiatives have at least one metric
- Weighting will be used to highlight critical metrics
- Metrics should avoid being manipulated
- Indices should be used to ease data review and aid in analysis

- Measures, and initiatives are aligned with the priorities of customers, employees and stakeholders

- Process measures correlate to outcome measures

- Business fundamentals will be included in the scorecard

Scorecard Metrics

The Scorecard is designed to provide a summary view of the underlying corporate metrics to Commanding Officer and the Acquisition Executive Board.

There is an effort to streamline the FISC Norfolk metrics brief. Although many departments have metrics and data charts that should be maintained at the departmental level, many do not rise to an ESC command level review. To pare-down these metrics, a scorecard has been designed for the command level. Whenever performance as indicated on the scorecard warrants more detailed review, the underlying metrics and graphics will be used

This section discusses the scorecard and its associated metrics for FISC Norfolk Acquisition Group operations. .It will guide the Group in data collection and presentation to ensure timely, consistent data collection and presentation

The Scorecard

The first step in developing the scorecard is to determine the performance metrics to be displayed. Within the Acquisition Group, these metrics are those provided by the initiative owners and approved by the Acquisition Executive Board.

The initiatives are aligned with the Naval Supply Systems Command Strategic Plan Goals. The strategic metric, objectives, and timing associated with each of these initiatives will form the basis for the Scorecard metric.

The Scorecard will utilize a "Red/Yellow/Green" format to summarize performance. Determination of the level of performance and allowable variation will set the criteria for appropriate color coding, while trending observations will be require two consecutive movements in the same direction.

Key Success Factors

The Key Success Factor metrics are indices reflecting both mission accomplishment and forward movement on vision attainment. The standards for growth metrics are typically determined by the fiscal month of the year, e.g. in December we should have accomplished 25% of the goal; or by the initiatives plan for implementation. Minimum grades or Statistical Process Control sets the standards for process metrics as appropriate. Individual metrics are not coded as "Red/Yellow/Green". Instead, the indices are rated, with the standard set by the summary of the individual metric within the respective index. "Green" will be assigned to any index achieving or within five percentage points of that standard, "yellow" will be assigned to any index scoring between fifteen

and five percentage points, and "red" will be assigned to all others. All initiative owners will report their metrics to ABM to support monthly reporting. All sites will provide their specific data, such as % of training hours or % metrics, to initiative owners at least two days prior to the ABM due date for command submission.

- Effectiveness Index: This consists of three weighted individual metrics.

Metrics	Initiative Owner	Frequency	Standard	Source
# of Customers Profiled	Marketing	Monthly	A growth metric determined by the annual plan.	Manual count
Catalogues and IDTCs on Portal	Portal	Monthly	A growth metric determined by the annual plan	Manual count
Customer Satisfaction Index	CRM	Monthly	A process metric. The standard is always 95% Highly Satisfactory or above.	NAVSUP Database

- Efficiency Index: This consists of four weighted individual metrics.

Metrics	Initiative Owner	Frequency	Standard	Source
Intranet Hits	Intranet PM	Monthly	A growth metric determined by the desired goal of each employee accessing the site every other day.	Website Hit Counter
Customers on Portal	Portal	Monthly	A growth metric determined by the annual plan	Manual count
e-Transactions Index	Innovative, Streamlined Acquisition Processes and Tools	Monthly	A process metric. The standard is always 92%. The metric will use the OSD report, but only include FISC-controlled processes of solicitations, award and closeouts. In final calculations, all subsidiary metrics associated with the awards metric will be counted individually.	OSD Paperless Metrics Report from ABM
% Paperless Review Board	COC of each site	Monthly	A growth metric determined by the desired goal of achieving 95% of review boards held by electronic media.	Manual count from the Review Board log.

- Sustainment Index: This consists of four weighted individual metrics.

Metrics	Initiative Owner	Frequency	Standard	Source
Series Standards Profiled	Personnel Development	Monthly	A growth metric determined by the desired goal of profiling ten critical Series/specialties.	Manual
% IDPs Executed	Personnel Development	Monthly	A growth metric determined by number of people in the ten critical series/subspecialties	Manual count
Training requirements resourced	Personnel Development	Monthly	A growth metric determined by identification of resources identified for the ten critical series/subspecialties	Manual count from Access Training Database
Training Hours Met	Each Detachment	Monthly	A growth metric determined by the desired goal of achieving 100% of the 40-hour requirement.	HRO

Initiative Metrics

Each initiative will have several initiatives associated with them. The scorecard will capture at least one metric for them The standards for growth metrics are typically determined by the fiscal month of the year, e.g. in December we should have accomplished 25% of the goal; or by the initiatives plan for implementation. Minimum grades or Statistical Process Control sets the standards for process metrics as appropriate. "Red/Yellow/Green" indicators are assigned to individual metrics.

Monthly metrics will be reported for the Acquisition Group as a whole. Individual sites will report quarterly metrics, with the:

- First month of each quarter reflecting Philadelphia,
- Second month reflecting Norfolk, and
- Third month reflecting Washington metrics.

Metrics	Initiative Owner	Frequency	Standard	Source
Customer Satisfaction Survey	CRM	Quarterly	A process metric with standards set by NAVSUP. Green equals attainment of NAVSUP goal of highly satisfactory rating. Yellow equals a grade within five percentage points of that standard, currently set at 90%	NAVSUP Database
Portal Customer Market Share	Product Development/ Portal Development and Execution	Monthly	A growth metric determined by dollar value of sales on the portal divided by the total sales of those same customers. Green will equate to within 90% of plan, yellow to within 80% of plan. The plan will be established as the projected annual sales of all portal customers, to suppliers that are on the portal.. Annual sales will be projected based upon the starting month of the customer portal usage.	IBM for Portal Sales, Dynamic Reporting for Total Sales
% Performanced Based Contracts	Innovative, Streamlined Acquisition Processes	Quarterly	A growth metric with the baseline set for each site based upon previous FY results. Green will be reported if the score exceeds 5% above the prior year, yellow if it is within 5% plus or minus of the prior year.	PMRS reports from ABM where B1D= Yes/Total Contracts Awarded
Reverse Auctions	Innovative, Streamlined Acquisition Processes	Monthly	A process metric determined by the number of planned auctions compared to the NAVSUP goal. Green equals planned attainment of the goal. Yellow equals planned auctions within 20% of the goal.	Manual
Self-Assessment Findings	Self-Assessment Program Management	Quarterly	A compilation process metric combining PMR, SAP, Large Procurement and Special Interest Item QA plan scores. Any red score or two yellow scores for any of these categories will equal a red for the metric. Any yellow score in any category will result in an overall yellow. Green will be assigned if all areas score green. Within PMR, total audits within 90% of schedule will be green, while within 85% will be yellow. Within SAP, excess error rates in one area will lead to a yellow rating, while two will lead to a red Within Large Procurement, excess error rates in two areas will lead to a yellow, while three will lead to a red. Within Special Interest, error rates greater than 10% will equal a yellow, and greater than 20% will equal a red	FISC Norfolk Det Philadelphia QAPM Database
Small Business	Small Business Managers	Quarterly	A process metric with standards set for each category. Failure to achieve two categories will equate to a yellow, while failure in three will equate to a red	PMRS
Overage Contract Closeout	Contract Closeout	Monthly	A process metric with green achieved when monthly closeouts equal or exceed a standard set at the total overage on hand divided by 12. Yellow will be assigned if closeouts are within 10% of that standard. All sites must reflect green for an overall grade of green. Any site with a red will result in a grade of red.	DRID 53 and Workload Staffing Reports
SPS Upgrade Effectiveness	Procurement Systems Management	Quarterly	TBD	TBD
% of Customer Requirements met via the Portal	Portal Development and Execution	Monthly	A process metric determined by the number of transactions on the portal divided by the total number of customer Purchase Card transactions. The standard will be set: as the percentage of transactions expected from their catalogue and contract vendors on the portal as determined by the % those suppliers achieved in the past fiscal year. A score of 90% will be green, while less than 80% will be red.	IBM for Portal Actions, Dynamic Reporting for Total Actions
% of FISC Markets Sourced	Market Managers	Quarterly	A growth metric determined after critical assessment of potential for requirements consolidation through contracts. The annual plan to analyze and award contracts by FSC will set the standard	Manual

NMCI Order Fulfillment Rates	NMCI	Quarterly	A process metric determined by comparing actual orders executed to the program manager's plan. Green will indicate the orders executed are running to plan. Yellow will indicate 0%-10% behind plan.	Manual
Employee Satisfaction	HRSC	Annual	A process metric provided through command assessment	HRSC Survey
Alignment	Metrics Alignment	Quarterly	A process metric reflecting results of the quarterly alignment survey. Standards are set for absolute and relative scores: (1) Absolute: If the lowest score is below 35 it will be yellow, if below 25 it will be red (2) Relative: If the difference between the highest and lowest score exceeds five, this will be yellow; if it exceeds ten, this will be red If both parameters are either red, or if there is one yellow and one red, the alignment metric is red. If only one parameter is red, the metric is yellow. If only parameter is yellow, the metric is green.	Alignment Survey Database
Intern Vacancies	ABM	Monthly	A growth metric determined by the number of intern billets without fills or selections. Vacancies in excess of 10%-20% of authorization will be yellow, greater than 20% will be red. However, after April of each fiscal year, yellow will be 0%-10% and red will be greater than 10%.	Manual

Reporting Requirements

The Scorecard requires timely reporting of accurate data in order to be a useful tool.

The monthly Scorecard's development is a team effort. Acquisition Group metric owners must contribute their data in a timely and accurate manner. The ABM division is responsible for the compilation of data for further submission to the FISC Norfolk metrics manager. These metrics are usually due near the end of the first full week of each month, although a specific schedule is promulgated with exact due dates. It is critical that each metric owner become familiar with the date reporting format and schedule to ensure the Acquisition Group Scorecard is as accurate as possible for the monthly review and subsequent posting to the Intranet.

Reporting Format

The following worksheet will be used to provide standardized input to the ABM. Owners may submit their input via e-mail; however, they should ensure the data is reported via the format of this section.

Key Success Factors

1. Effectiveness Index:: This consists of three weighted individual metrics. Each site will provide input from their offices on customer profiling and new catalogues to the Acquisition Group initiative lead. The CRM lead will obtain data from the NAVSUP database on the customer satisfaction index for all sites. It will consist of the % of all data scores received for all elements that are rated highly successful or better.

Month		Site						
Comments								
Metrics	Weighting	Plan			Actual			
		Data	Score	Weight	Data	Score	Weight	
a. # of Customers Profiled:	.30							
b. Catalogues and IDTCs on Portal:	.30							
c. Customer Satisfaction Index:	.40							
Index		Total			Total			
		Color			Trend			

2. Efficiency Index:: This consists of four weighted individual metrics. Detachment Philadelphia will provide intranet data directly to ABM. Each site will provide input from their offices on customer portal to the initiative lead. Each site will forward their e-transactions data from the OSD Paperless Metrics Report to ABM. The ABM will calculate the final number based upon the total of the actions in the following categories:

    - Solicitations issued
    - Awards and modifications issued to:
        a. Files
        b. Originator
        c. ACO
        d. DFAS for payment
        e. DFAS for accounting
        f. Contractor
    - Contract Closeouts

Each site will review their CRB log to provide the data for the number of paperless and total CRBs.

Month		Site					
Comments							
Metrics	Weighting	Plan			Actual		
		Data	Score	Weight	Data	Score	Weight
a. # of Intranet Hits	.25						
b. Customers on Portal	.25						
c. e-Transactions Index	.40	95%	80	32			
d. % Paperless Review Boards	.10	75%	80	8			
Index		Total			Total		
		Color			Trend		

3. Sustainment Index: This consists of four weighted individual metrics. The Personnel Recruitment, Development and Retention lead will identify how many series have been profiled. Each site will report how many IDPs are due/have been reviewed and executed based upon profiled series standards. They will also report how many of the training requirements identified in the completed IDPs have been sourced and resources identified. Each site will provide input from their offices to ABM on the % of personnel requiring and completing the 40-hour training requirement.

Month		Site					
Comments							
Metrics	Weighting	Plan			Actual		
		Data	Score	Weight	Data	Score	Weight
a. Series Standards Profiled	.30						
b. % IDPS executed	.30						

c. Training Requirements Resourced	.10						
d. Training Hours Met	.30						
Index		Total		Total			
		Color		Trend			

Initiative Metrics

4. Customer Satisfaction Survey:

Quarter		Site				
Comments						
Quarter (Q/FY)	Qty	Unsat.	Marginal	Satisfactory	Highly Sat.	Superior
1:						
2:						
3:						
Color:				Trend:		

5. Portal Customer Market Share:

Month		Site			
Comments					
Customers	Months on Portal	Annual Plan		Actual YTD Performance	
		Portal Sales	Portal Sales Est.	Plan YTD	Portal Sales
FISC Norfolk		579,026			
NNSY		249,396			
SIMA		79,792			
PWC		91,044			
FOSSAC		0			
NAVTRANS		0			
DET WASH		25,000			
DET PHIL		3,000			
NAVICP		100,000			
NAVSUP		0			
NDW		25,000			
Total		1,152,258		0	0
Percentage	**!Zero Divide**	Color		Trend	

6. % Performanced Based Contracts

Month		Site	
Comments			

	Philadelphia	Norfolk	Washington
Plan			
a. FY01 %			
b. x 10% Growth			
Actual			
a. Performanced Based Contracts			
b. Total Contracts			
c. Percentage			
Difference to Plan			
Color			
Trend			

7. Reverse Auctions:

Month		Site	
Comments			

Goal	10		Actual	4
Item	Site	Date	Status (Planned/Complete)	Estimated $/Savings $
Color			Trend	

8. Self Assessment Findings

a. PMR

Month		Site	Norfolk & Charleston
Comments			

Actions		Scheduled	Completed	%
Desk Audits				
PMR and Site Audits				
Overall	Color		Trend	

b. QA Plan

Quarter		Site	
Comments			

SP1		SP2		SP3		SP4		SP5		Color		SI1		Color	
LC1		LC2		LC3		LC4		LC5		LC6		LC7		Color	
Overall				Color						Trend					

9. Small Business:

Quarter		Site	
Comments			

	SB	SDB	WOSB	HZSB	Vet	HBC	Month
Goal	34.4	2.5	5.0	2.5	3.0	-	
Actual							
Overall		Color			Trend		

10. Overage Contract Closeout

Month		Site	
Comments			

	Philadelphia	Norfolk	Washington	NNSY
On Hand				
On Hand/12				
Overage				
Completed				
DRID 53				
Difference to Plan				
Color				
Overall	Color		Trend	

11. SPS Upgrade Effectiveness Quarterly TBD TBD

12. % of Customer Requirements met via the Portal

Month		Site	
Comments			

Customers	Months on Portal	Annual Plan			Actual YTD Perfomance		
		PC Actions	Portal Action Est.	% of Est.	Plan YTD	Portal Actions	%
FISC Norfolk							
NNSY							
SIMA							
PWC							
FOSSAC							
NAVTRANS							
DET WASH							
DET PHIL							
NAVICP							
NAVSUP							
NDW							
Total		0			0		
Percentage		Color			Trend		

13. % of FISC Markets Sourced

Month		Site	
Comments			
Market	# of FSCs	Plan	Actual
Color		Trend	

14. NMCI Order Fulfillment Rates

Quarter		Site	
Comments			
Increment		Orders	Deobligation Mods
1.0	Planned		
	Actual		
1.5	Planned		
	Actual		
2.0	Planned		
	Actual		
2.5	Planned		
	Actual		
Color		Trend	

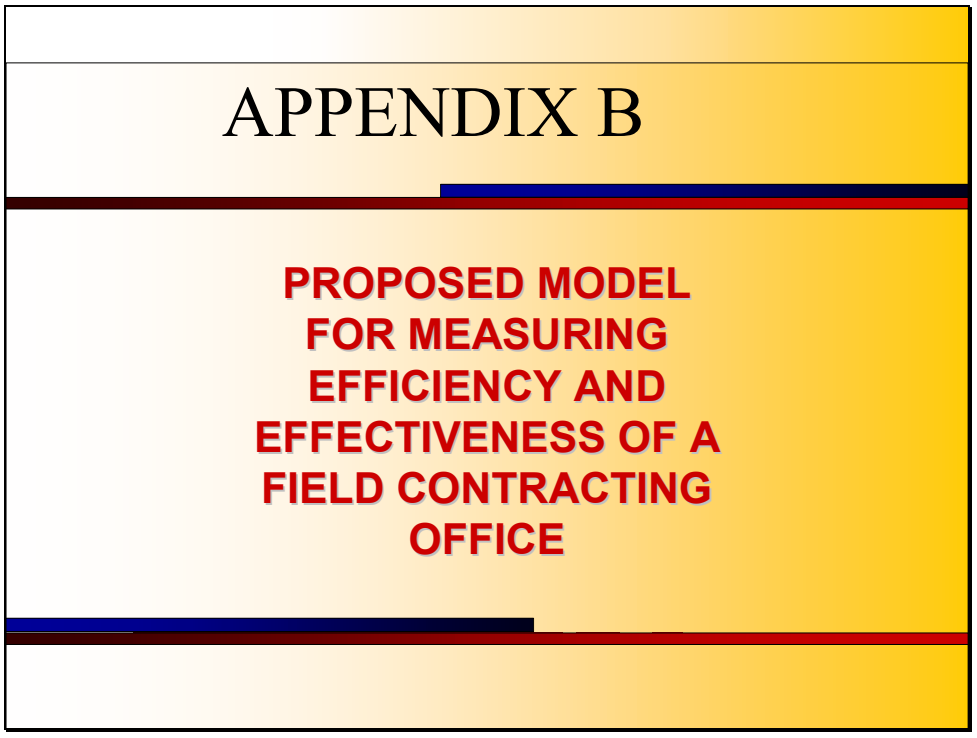
15. Employee Satisfaction

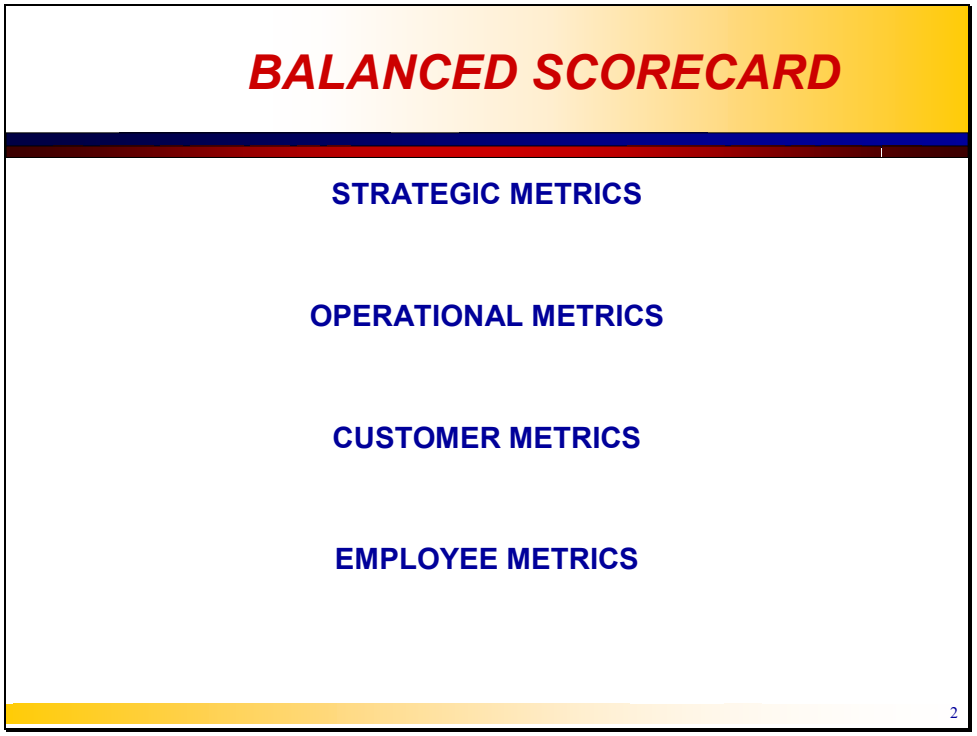
16. Alignment

Quarter		Site		
Comments				
	Strategy	People	Customer	Process
Score				
Lowest Score		Color		
Biggest Difference		Color		
	Color		Trend	

17. Intern Vacancies

Month		Site	
Comments			
Billets	Offers	Filled	Vacancies
Color		Trend	

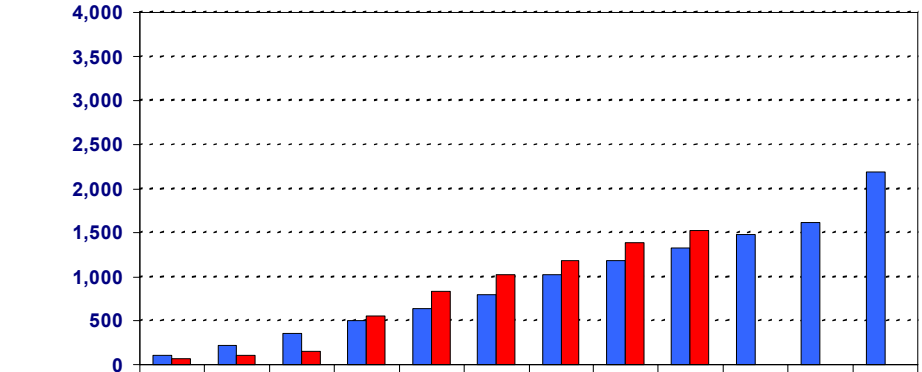

APPENDIX B
PROPOSED MODEL FOR MEASURING EFFICIENCY AND EFFECTIVENESS OF A FIELD CONTRACTING OFFICE


BALANCED SCORECARD
STRATEGIC METRICS
OPERATIONAL METRICS
CUSTOMER METRICS
EMPLOYEE METRICS
2

STRATEGIC METRICS

3

COMPARISION OF 2 FISCAL YEARS: ACTIONS OVER 25K ACTIONS



	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
FY01 Actions	104	224	356	501	635	796	1,025	1,184	1,331	1,477	1,622	2,192
FY02 Actions	68	107	159	552	833	1,023	1,179	1,386	1,522			

Source: PMRS Database DF62N

Does not include actions where total dollars are "0"

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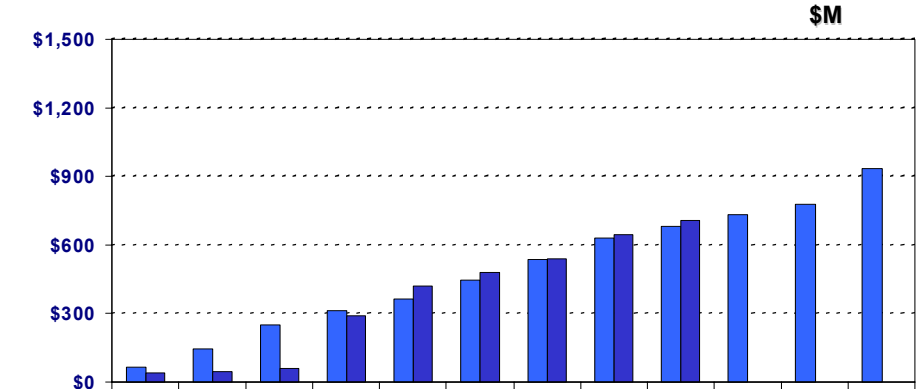
COMPARISION OF 2 FISCAL YEARS: DOLLARS OVER 25K ACTIONS



	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
FY01 OBS	$67	$146	$252	$313	$362	$446	$538	$632	$681	$734	$776	$932
FY02 OBS	$39	$47	$61	$290	$422	$481	$542	$646	$710			

Source: PMRS Database DF62N

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LARGE PURCHASE TOP 10 SUPPLIERS BY DOLLARS

SUPPLIER	FSC DESCRIPTION	TOTAL DOLLARS
Electronic Data Systems Corp	Other ADP & Telecommunication Svcs	$60,422,537
Dell Marketing LP	ADP Central Processing Unit	$44,871,014
Innovative Logistics Technique	Logistics Support Services	$33,477,534
General Dynamics Gov Sy	RDTE/Other Defense Adv Tech Dev	$32,540,992
AMSEC LLC	Maint & Repair of Eq/Miscellaneous Equip	$25,005,445
Goodwill Industries of SE WI	Other ADP & Telecom Svcs	$23,520,814
Booz Allen & Hamilton, Inc.	Tuition, Registration & Membership Fees	$21,854,247
Mantech Systems Engineering Co.	Other ADP & Telecommunications Svcs	$20,964,620
San Diego City College	Training/Curriculum Development	$19,485,168
Lockheed Martin Services In.c	Training/Curriculum Development	$18,755,870

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LARGE PURCHASE
TOTAL ACT/OBS FOR SUPPLIES/SERVICES

	Actions	Obligations
Supplies	163	$59,858,299
Services	1424	$650,497,165

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LARGE PURCHASE
TOP 10 FSC'S BY ACTIONS (SERVICES)

Other ADP & Telecommunication Services (D399)	203
Logistic Support Services (R706)	173
Tech Rep Svcs/Aircraft Gnd Handling Equip (L017)	97
Other Medical Services (Q999)	64
Maint & Repair of Eq/Misc Equipment (J099)	61
Engineering Technical Services (R425)	57
RDTE/Other Defense-Adv Tech Dev (AD93)	55
Training/Curriculum Development (U008)	44
Maint & Repair of Eq/Ships-Sml Craft-Docks (J019)	40
Tech Rep Svcs/Aircraft Comps. & Accys (L016)	37

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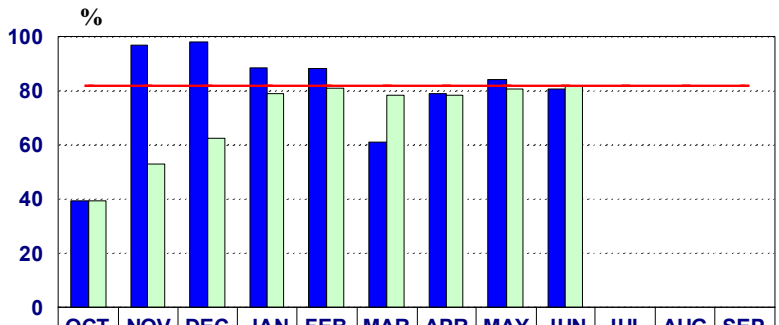
COMPETITION

A monthly update of the actual competition rate versus the goal



	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MONTHLY	39.2	96.9	98.1	88.5	88.1	61.2	78.9	84	80.6			
CUMULATIVE	39.2	52.9	62.6	78.9	81.1	78.4	78.7	80.8	81.9			
OBS GOAL	82	82	82	82	82	82	82	82	82	82	82	82

Goal 82%

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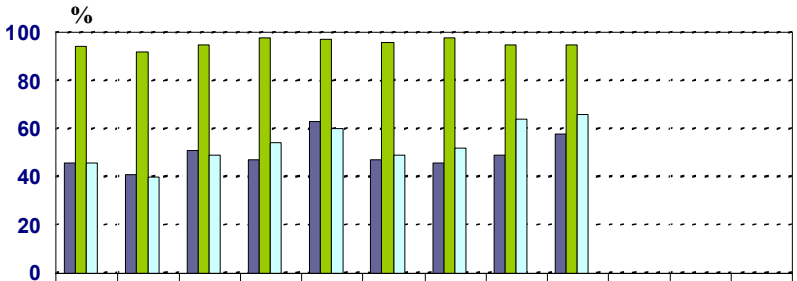
E-BUSINESS (Paperless Metrics)



	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
ELEC PRs	46	41	51	47	63	47	46	49	58			
ELEC SOL	94	92	95	98	97	96	98	95	95			
ELEC AWDS	46	40	49	54	60	49	52	64	66			

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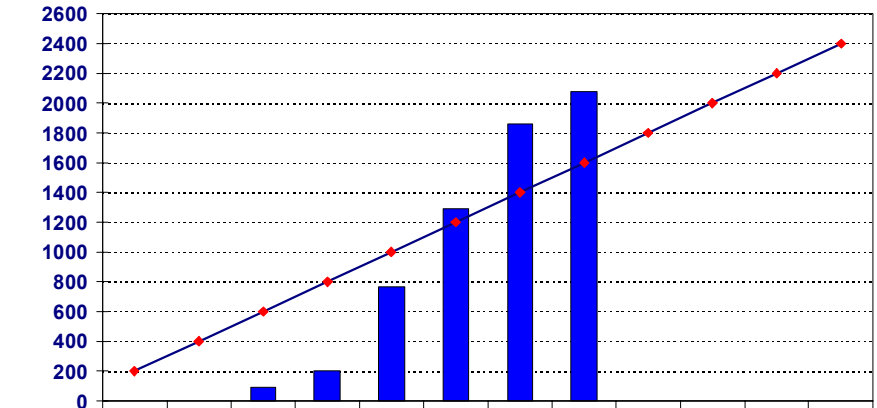
ANTICIPATED FUTURE OBLIGATIONS

	Description	Customer	Award Date	Obligations FY02	FY03	FY04	FY05	FY06	FY07
1	ETS for C4I	SPAWAR $86M	Aug 02	$ 3M	$15M	$ 16M	$ 17M	$18M	$17M
2	BPR/ABC SUPPORT SVCS	JFCOM $25M	Jun 02	$3.0M	$5.0M	$5.0M	$6.0M	$6.0M	
3	ETS	NAVSHIPSO $160M	Sep 02	$11.0M	$32.0M	$32.0M	$32.0M	$32M	$21M
4	CA Food, Mat Magt, Custodial	BUMED CAL REG $50M	Apr 03		$5M	$10M	$10M	$10M	$10M
5	GTMO Telecom.	NCTAMSLANT $29.9M	Apr 02	$ 3.3M	$ 3.4M	$3.5M	$ 3.6M	$ 3.7M	
6	NTCSS Flt Support Svcs	SPAWARSYSCEN $154M	Apr 02	$29.5M	$30.7M	$32.0M	$33.4M	$14.2M	
7	Curriculum Development	NETPDTC $29M	May 02	$ 5.0M	$ 5.9M	$ 5.9M	$ 5.9M	$ 5.9M	
8	Navy College Learning Prog.	NETPDTC $49M	Jul 02	$2.0M	$ 9.8M	$ 9.8M	$ 9.8M	$ 9.8M	$7.0M
9	Integrated Supply Support	PNS Great Lakes $25M	Sep 02		$5M	$5M	$5M	$5M	$5M
10	CA Admin	SUPSHIPS $100M	Aug 02		$20M	$20M	$20M	$20M	$20M

02P4

CONTRACT CLOSE-OUT STATUS



	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
FY02	0	0	92	200	769	1293	1858	2076				
GOAL	200	400	600	800	1000	1200	1400	1600	1800	2000	2200	2400

* Includes 1,412 SAP actions

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CONTRACT CLOSE-OUT DOLLARS DEOBLIGATED

	TOTAL F/Month	Year-To-Date
1990	0	582
1991	0	0
1992	0	177,179
1993	0	0
1994	0	16,010
1995	0	24,509
1996	0	0
1997	0	0
1998	0	168,898
1999	22,794	258,720
2000	2,024	25,683
TOTAL	0	671,581

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MONTHLY CLOSEOUT METRICS

Data Category	FISC (GTE $25K)	NAVSUP (GTE $100K)	ASN Website
Beg Balance Eligible	4129	1561	3269
New Eligible this Period	120	61	205 *
Contracts Closed this Period	336	96	96
Ending Balance Eligible	3913	1526	3378 *
Overage Ending Balance	1569	538	N/A

* 205 number includes contracts imported for months of March, April and May 2002 (3 months added to ASN website on 11 June 2002)

** ASN website still to be updated to reflect completed closeouts

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SMALL BUSINESS GOALS/ACHIEVEMENTS

	FISC Norfolk $	Det Phila. $	FISC Norfolk Target	FISC Norfolk Actuals	Det Phila. Actuals
Total to U.S. Firms	$953,909,039	$514,736,321			
Small Business	$342,156,226	$133,504,458	34.4%	35.9%	25.9%
SDV	$580,793	$245,610	3.0%	0.1%	0.05%
Small Disadvantaged Business	$140,693,354	$77,374,168	11.2%	14.8%	15.0%
Women-Owned Small Business	$63,282,690	$45,871,953	3.8%	6.6%	8.9%
HUB Zone	$15,265,341	$1,718,730	2.5%	1.6%	0.3%
HBCU/MI	$18,462,301	$18,462,301	22.5%	77.1%	77.8%

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BUSINESS DEVELOPMENT

Customer	Description of Initiative	Status
OSD/C3I PIMS International Outreach	Partnership for Peace Information Mgmt Systems Svcs Support	Contractual planning mtg to be scheduled for support of PIMS program.
JFCOM (J8)	Technical Support Svcs	Met 5/6; expect SOW NLT 6/30.
CNRNE	Husbanding Contracts	RFP issued 6/5/02.
Naval War College	War Gaming Support Svcs	BAA drafted. Pre-Solicitation Conference 6/25/02.
Joint Forces Intelligence Command	General Contracting Support	J4 advised that JFIC will be forwarding some requirements to us.

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02P1

MAJOR PROGRAM SUPPORT

- ERP
- Inactive Ships
- NEMMI
- CNET
- JFCOM
- FMS
- Travel Management
- Shipboard Copier
- A-76
- Acquisition Reform Office
- NAVICP FMS Logistic Support
- Shop Towels
- Task Force Excel

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OPERATIONAL METRICS

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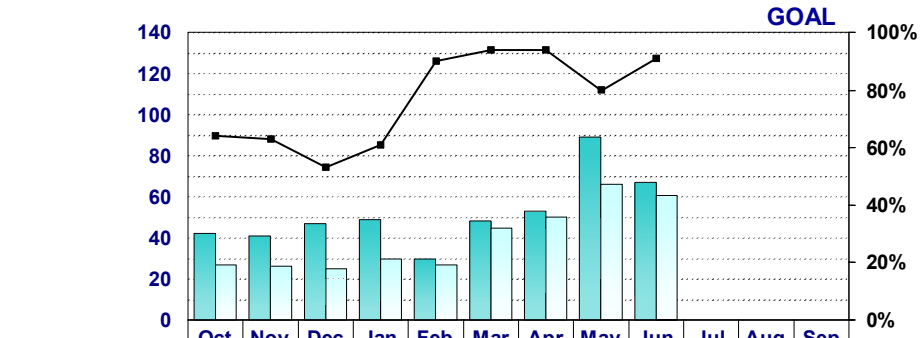
CYCLE TIME METRICS



	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Awards	42	41	47	49	30	48	53	89	67			
Goal Achieved	27	26	25	30	27	45	50	66	61			
Monthly %	64%	63%	53%	61%	90%	94%	94%	80%	91%			

TIMELY SERVICE – LT $25K – 20 DAYS OR LESS

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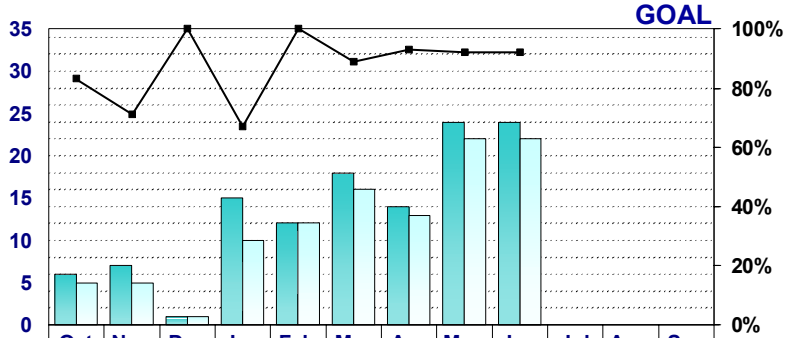
CYCLE TIME METRICS (CONT)



	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Awards	6	7	1	15	12	18	14	24	24			
Goal Achieved	5	5	1	10	12	16	13	22	22			
Monthly %	83%	71%	100%	67%	100%	89%	93%	92%	92%			

TIMELY SERVICE – $25K – $100K (SAP) - 30 DAYS OR LESS

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COMPETITIVE SOURCING

A-76 Metrics *

Cost Comparison Method Used	In Process	Completed	Gov't Retained
Full Study	17	23	21
65 and Under	3	31	31
10 and Under	10	47	36
Direct Conversion	1	16	N/A

* Plus 33 Cancellations of Studies

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STREAMLINED A-76 PROCESS

A-76 Metrics *

Process	Studies Completed	Average PALT	PALT Range
Full Study	23	11.74months	6-13 months
65 and Under	31	3.45 months	1-6 months
10 and Under	47	3.04 months	1-6 months

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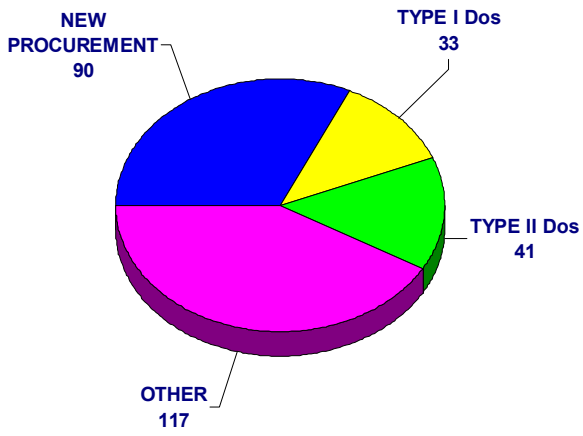
WORK-IN-PROCESS PROFILE



TOTAL FOLDERS - 281

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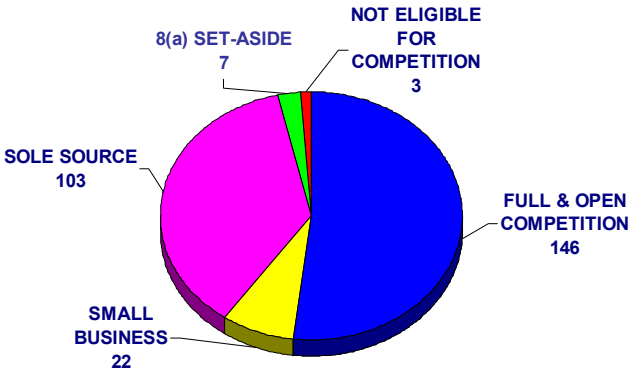
WORK-IN-PROCESS PROFILE ACQUISITION STRATEGY



TOTAL FOLDERS - 281

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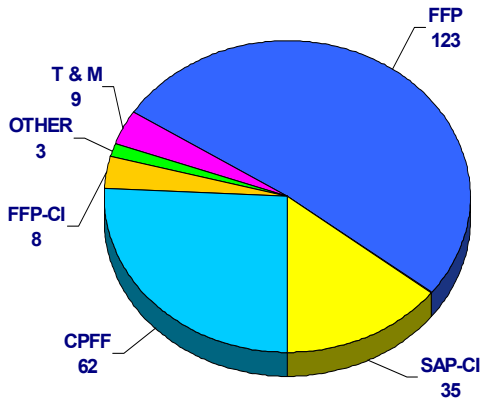
WORK-IN-PROCESS PROFILE CONTRACT TYPE



TOTAL FOLDERS - 281

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NEW PROCUREMENTS SUMMARY 90 FOLDERS

	Measurement	Competitive	Sole Source	Competitive CI	Sole Source CI	Total
Unsolicited Phase	PR rec't date thru sol. Issue date	30	16	4	1	51
Solicitation Phase	From sol. issued date actual closing date	6	4	3	0	13
Tech Eval Phase	After sol. closes & TE is requested	7	0	1	0	8
Negotiation Phase	After sol. closes	4	12	2	0	18
Total		471	32	10	1	90

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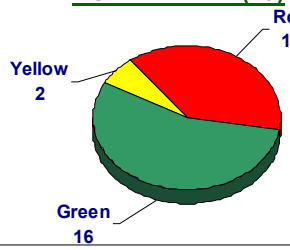
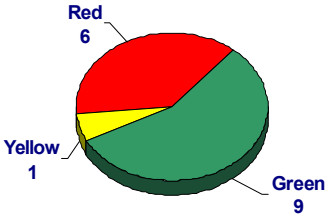
UNSOLICITED PHASE (51 PROCUREMENTS)

COMPETITIVE (29)

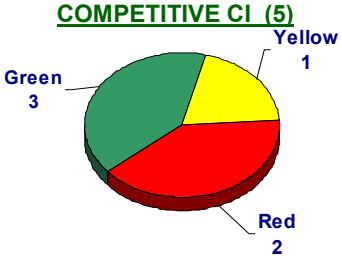


Stratification
- 0 - 30 days
- 31 - 45 days
- Over 45 days

SOLE SOURCE (16)

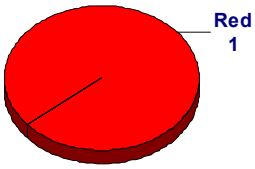


COMPETITIVE CI (5)



Stratification
- 0 - 15 days
- 16-30 days
- Over 30 days

SOLE SOURCE CI (1)



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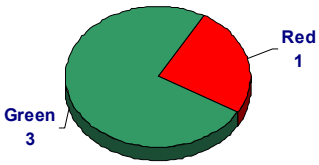
SOLICITATION PHASE (13 PROCUREMENTS)

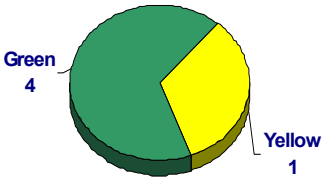
COMPETITIVE (6)

Stratification
- 0 - 30 days
- 31 - 45 days
- Over 45 days

SOLE SOURCE (4)



COMPETITIVE CI (3)



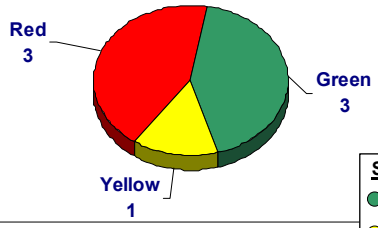
Stratification
- 0 - 15 days
- 16-30 days
- Over 30 days

SOLE SOURCE CI (0)

28

TECH EVAL PHASE (8 PROCUREMENTS)

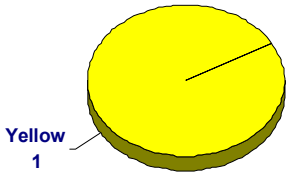
COMPETITIVE (7)



SOLE SOURCE (0)

Stratification
- 0 - 30 days
- 31 - 45 days
- Over 45 days

COMPETITIVE CI (1)

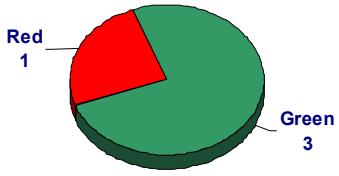


SOLE SOURCE CI (0)

29

NEGOTIATION PHASE (18 PROCUREMENTS)

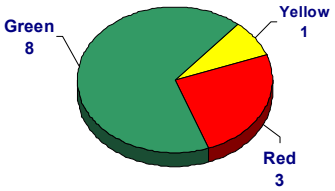
COMPETITIVE (4)



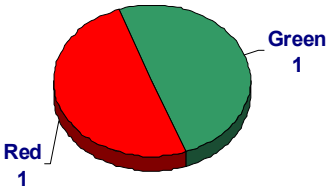
WITH TECH EVAL

Stratification
- 0 - 30 days
- 31 - 45 days
- Over 45 days

SOLE SOURCE (12)



COMPETITIVE (2)



WITHOUT TECH EVAL

Stratification
- 0 - 15 days
- 16-30 days
- Over 30 days

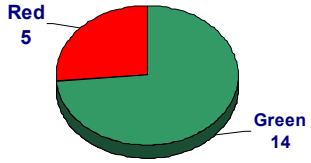
SOLE SOURCE (0)

30

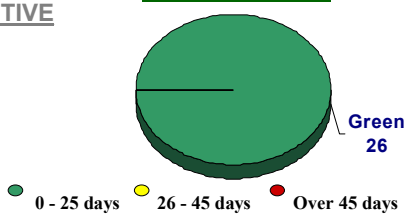
DELIVERY ORDERS (74)

NON-COMPETITIVE

TYPE I DOs (19)

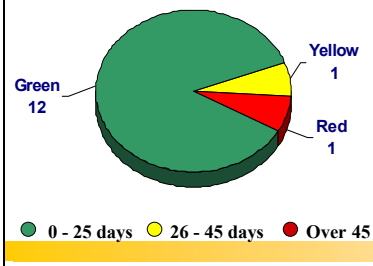


TYPE II DOs (26)

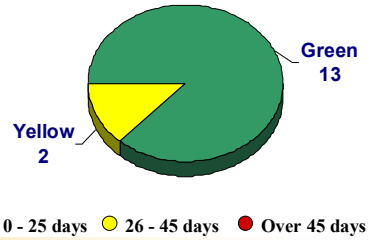


COMPETITIVE

TYPE I DOs (14)



TYPE II DOs (15)



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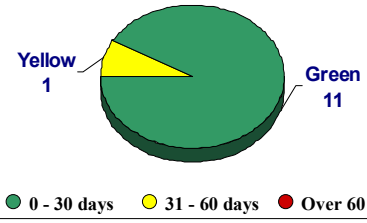
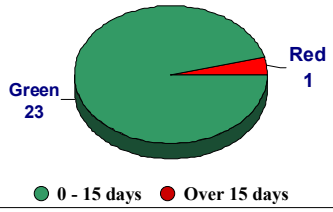
OTHER PROCUREMENT ACTIONS (117)

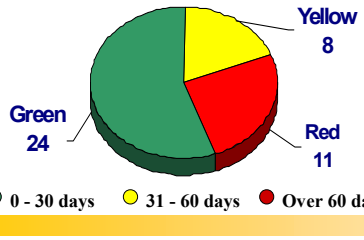
OPTIONS (12)



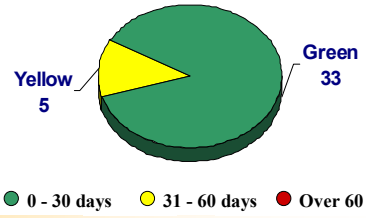
FUNDING ACTIONS (24)



CHANGE ORDERS (43)



SAP (38)



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Large Purchase Self-Assessment Findings

Metric	Rating	Standard	Actual
LC1 Pre-Award Market Research/AR	✓	0%	5%
LC2 Pre-Award RFP	✓	0%	15%
LC3 Pre-Award J&As	✓	0%	0%
LC4 Award Source Selection	✓	0%	5%
LC5 Award Business Clearances	✓	0%	30%
LC6 Post-Award Closeout	✓	0%	16%
LC7 Post-Award File Maintenance	✓	0%	DNR

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Simplified Acquisition Self-Assessment Findings

Metric	Rating	Standard	Actual
SP1 Pre-Award Screening	✓	10%	35%
SP2 Pre-Award Competition	✓	10%	30%
SP3 Pre-Award Small Business	✓	15%	16%
SP4 Post-Award Fair & Reasonable	✓	10%	40%
SP5 Post-Award Use of FSS	✓	10%	25%
SI1 Special Interest Reviews	✓	10%	5%

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Self Assessment Recommendations

- **Philadelphia**
  - *All Team Leaders are responsible for signing all SAP Actions*
  - *Weekly training sessions on SAP will be conducted starting Oct 01 for 1105s and Team Leaders*
  - *Modify the GSA Template Memo*
  - *Establish SAP Toolkit and post on Intranet*
  - *Team Leaders and negotiators must ensure all documentation and chronology of events are in file*

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CUSTOMER METRICS

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LARGE PURCHASE
TOP 10 CUSTOMERS BY ACTIONS

Customer/UIC	Total Actions
NAVAL AIR SYSTEMS COMMAND HEADQUARTERS (N00019)	107
NAVAL EDUCATION & TRNG PROF MGMT SUP ACT (N68322)	99
NAVAL SHIPYARD, NORFOLK (N00181)	96
SPAWARS (N66001)	75
FLEET TECHNICAL SUPPORT CENTER ATLANTIC (N65912)	70
NAVAL SEA LOGISTICS CENTER CODE 134 (N65538)	62
JOINT WARFIGHTING EXP BATTLE LAB JWEBL (N3188B)	60
NAVICP (N00391)	51
JTASC (N39792)	47
NAVAL AIR TECH DATA & ENGR SVC COMMAND, NAS NORTH ISLAND	41

JAN 02 Customers Provided. PMRS generates inaccurate FY02 data due to DD350 block changes (from Section G to Block E4). Working on solution.

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LARGE PURCHASE
TOP 10 CUSTOMERS BY DOLLARS

Customer/UIC	Total Dollars
NAVSUPSYSCOM HQ (N00023)	$51,909,654
NAVAL INVENTORY CONTROL POINT (N00391)	$50,168,532
NAVAL SHIPYARD, NORFOLK (N00181)	$44,906,846
JOINT WARFIGHTING EXP BATTLE LAB JWEBL(N3188B)	$36,439,804
COMMANDER IN CHIEF PACIFIC FLEET, NAVBASE (N00070)	$34,428,259
NAVAL EDUCATION & TRNG PROF MGMT SUP ACT (N68322)	$31,291,146
NAVAIRSYSCOM HQ (N00019)	$25,798,773
SPAWAR CHESAPEAKE (N68561)	$24,466,863
SERVICE SCHOOL COMMAND, NTC (N0580A)	$21,712,997
SPAWAR CENTER (N66001)	$20,448,150

JAN 02 Customers Provided. PMRS generates inaccurate FY02 data due to DD350 block changes (from Section G to Block E4). Working on solution.

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WHAT DO WE BUY FOR OUR TOP TEN CUSTOMERS

CUSTOMER	FSC	# Actions
NAVAIR – N00019	R706	81
	7690	8
	AC15	7
	1680	2
	5998	2
NATPDTC – N68322	D399	57
	U008	26
	U099	11
	D301	2
	R699	2

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WHAT DO WE BUY FOR OUR TOP TEN CUSTOMERS

CUSTOMER	FSC	# ACTIONS
NAVAL SHIPYARD NORFOLK – N00181	J099	52
	R425	11
	D399	6
	R421	4
	2010	3
FLEET TECHNICAL SUPPORT CENTER ATLANTIC – N65912	L017	70

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WHAT DO WE BUY FOR OUR TOP TEN CUSTOMERS

CUSTOMER	FSC	# ACTIONS
NAVSEA LOGISTICS CENTER CODE 134 – N65538	L099	30
	L017	16
	R425	14
	H399	1
	R706	1
SPAWARS – N66001	L012	25
	L016	15
	7010	9
	7030	6
	7050	5

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WHAT DO WE BUY FOR OUR TOP TEN CUSTOMERS

CUSTOMER	FSC	# ACTIONS
JWEBL N3188B	AD93	52
	7030	3
	R706	2
	AC61	3
NAVAL AI TECH DATA & ENER SERVICE COMMAND – N32379	R425	20
	L016	14
	L017	6
	J099	1
JTASC – N39792	V231	11
	R706	8
	D399	7
	B599	6
	AC61	5

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WHAT DO WE BUY FOR OUR TOP TEN CUSTOMERS

CUSTOMER	FSC	# ACTIONS
NAVICP – N00391	R407	21
	R408	8
	R706	5
	R699	4
	M299	3

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EMPLOYEE METRICS

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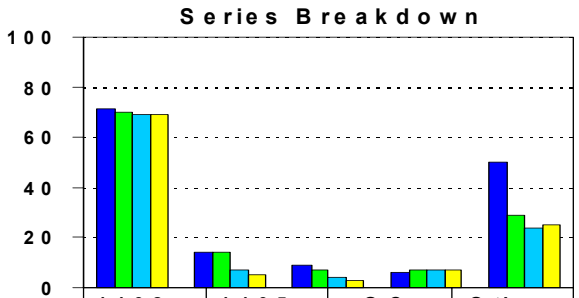
STAFFING



	1102s	1105s	OC	Other
9/30/99	71	14	6	50
9/30/00	70	14	7	29
9/30/01	69	7	7	24
Current	69	5	7	25

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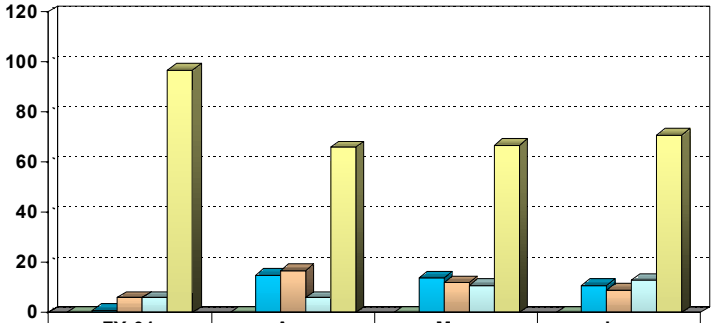
TRAINING STATISTICS



	FY-01	Apr	May	Jun
0 hrs	0	0	0	0
1-8 hrs	1	15	14	11
9-24 hrs	6	17	12	9
25-39 hrs	6	6	11	13
40+ hrs	97	66	67	71

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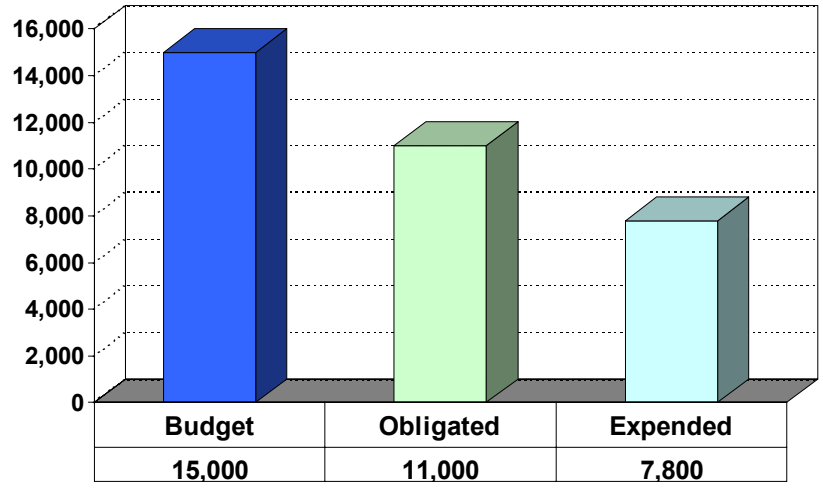
1102/1105 TRAINING BUDGET



Source:OTF Report

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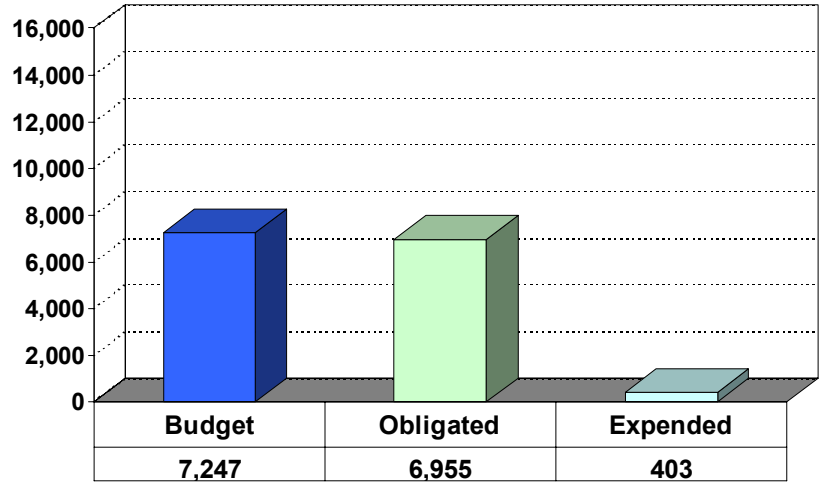
NON
1102/1105 TRAINING BUDGET



Source:OTF Report

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